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جدول المحتويات

#### مقدمة INTRODUCTION

Programming is giving instructions to computer to perform the required job, the process of programming have more than one stage from analysis and design to implementation and test.

البرمجة هي اعطاء التعليمات للحاسب لكى ينفذ العملية المطلوبة وعملية البرمجة (انشاء التطبيقات) تتطلب اكثر من مرحلة مرورا بالتحليل والتصميم الى التطبيق والاختبار

The most common way to do programming is (writing code) which our compiler under usage can understand based on the syntax of the programming language.

To write code you need software called a Code Editor (CE), which Enable the programmer to organize his/her source code file, Modern Code Editors comes with nice features like (Auto completion, Syntax highlighting & IntelliSense) which enable the programmer to work more easier and faster.

لكتابة الكود ان بحاجة الى محرر للكود الذى يمكنك كمبرمج من تنظيم ملف الشفيرة المصدرية الخاص بك ومحررات الكود الحديثة تاتى بملامح رائعة مثل الاكمال التلقائى واظهار القواعد النحوية والاحساس الادراكى الذى يمكن المبرمج من العمل بسهولة وسرعة

Since coding requires from the programmer the attention and effort, a lot of researchers focus on this point, some researches work on making coding less harmful while other researchers try to eliminate and reduce the necessary and the need of coding which we say about (Programming without coding)

لان عملية كتابة الكود نتطلب من المبرمج التركيز والانتباه فان هناك العديد من الابحاث تركز على تلك النقطة واتجه بعض الباحثين الى تسهيل الكود بينما اتجه اخرون الى الابتعاد عن الكود مما يسمى بالبرمجة بدون كود

There are a lot of steps towards (Programming without coding), the first step was (Copy & Paste) operations where the programmer write the code one time then copy it and use it another time in another program, and this without doubt is very bad solution and seems to be the heart of problems.

The second step was the (Code Bank) where the programmer store his common code in one place to get it quickly and still do (Copy & Paste) Operations.

The third step was the (Library) where a one or more of functions are encapsulated together and are available for use directly by the programmer after referring to the library header file in the source code and referring to the path of the library file for usage by the linker to produce executable file.

The forth step was the (Template) which is a mask of code, which can be used more than one time.

The fifth step was the (Code Generator) which uses (Templates) and get data from the programmer to generate the code automatically.

The Sixth step was the (Designers) like (Database designer, Class Designer, Form Designer, Menu Designer, Report Designer,...etc)

The seventh step was the (Wizard) which is a group of interaction pages that end up with generating designer files and source code.

In these days the (IDE and Frameworks) are used to integrate Libraries, Templates, Code Generators, Wizards and Designers together.

But still the Programmer/Developer needs to write code to complete his task (the required job).

Programming without coding technology presents the first general purpose programming without coding language (Mahmoud), programming without coding environment (RPWI) and programming paradigm (DoubleS = Super Server) for developing software applications 100% without coding by providing full isolation from the programming language syntax where the programming effort done through interaction instead of writing code and (You need to know procedure instead of being declarative).

تكنولوجيا البرمجة بدون كود تقدم اول لغة برمجة عامة بدون كود (محمود) وبيئة البرمجة بدون كود و نمط البرمجة الخادم الممتاز لكى يتم انتاج التطبيقات 100% بدون كود مع تقديم العزل الكامل من قواعد لغة البرمجة حيث ان مجهود البرمجة يتم من خلال التفاعل مع الواجهة الرسومية بدلا من كتابة الكود اى انك بحاجة الى معرفة خطوات روتينية بدلا من الاعلان عن ماتريد. Since Programming without coding technology change the programming world from it's heart (The Code), it's expected form this new technology to present something different replace what we use while coding.

•

البرمجة بالكود Coding	البرمجة Programming without coding بدون كود
المشكلة او الوظيفة Job/Problem	الهدف Goal
عددا من الاسطر Lines of code + Comments في الكود	خطوة Step
محرر الكود Code Editor	مصمم الهدف Goal Designer
كتابة الكود Writing Code	التفاعل Interaction
المترجم Compiler	Interactive Language (GUI) لغة تفاعلية تتمثل (GUI) في واجهة رسومية
Programming Language Syntax قواعد لغة البرمجة	انت بحاجة الى You need to know procedure معرفة الاجراءات الروتينية
Wizards & Code Generators المعالجات Wizards	الناقل Transporter

لان تكنولوجيا البرمجة بدون كود تغير عالم البرمجة من قلبه (الكود) فانه من المتوقع ان تقدم شيئا بديلا يحل محل ماهو موجود اثناء كتابة الكود

Table 1: Coding vs. programming without coding

# Goal Designer vs. Code Editor

مصمم الهدف بديلا لمحرر الكود

Goal Designer is the tool of programming without coding Inside programming without coding technology

مصمم الهدف هو اداة البرمجة بدون كود داخل تكنولوجيا البرمجة بدون كود

- بديل كامل لمحرر الكود Goal Designer is Full Replacement for Code Editor 🖊
- Goal Designer can work side by side with Code Editor if this feature is يمكن ان يعمل بجانب محرر الكود اذا كانت تلك الخاصية مطلوبة
- Goal Designer manage your source code file in Modern way, each goal is يدير الشفيرة المصدرية group of steps, while each step contains its block of code الخاصة بك بطريقة حديثة حيث ان الهدف مجموعة من الخطوات وكل خطوة عبارة عن مجموعة من الإكواد
  - Using code extractor application, you can create source code file by extracting code from one goal or more. باستخدام مستخرج الكود يمكنك ان تستخرج الكود مستخرج الكود مستخرج الكود مستخرج الكود مستخرج الكود عنه من الإهداف



#### Fig. 1 (The idea of Goal Designer)

-:ملامح مصمم الاهداف Goal Designer Features



- نحرير اسم الخطوة Edit Step name
- حذف الخطوة Delete Step
- نقل الخطوة لاعلى Move Step Up in the steps tree نقل الخطوة ال
- نقل الخطوة لاسفل Move Step Down in the steps tree
- التفاعل لتحديد وظيفة الخطوة Interaction to determine the job of the step
- 🖊 Step Details (Data, Analysis, Information, Code, Info) الكل خطوة تفاصيل تحددها
- نسخ مجموعة من الخطوات Copy Step or group of steps into buffer 🖊
- المسق الخطوات Insert Step or group of steps from buffer to the steps tree المسق الخطوات

## Interaction vs. writing code التفاعل بدلا من كتابة الكود

Interaction used to determine the job of the step التفاعل يستخدم لتحديد وظيفة الخطوة The procedure of the interaction process

- Determine step تحديد الخطوة
- Determine component to interact with تحديد المكون الذى نتفاعل معه
- Enter data required by the selected component ادخال البيانات المطلوبة

As a result of the interaction process نتيجة عملية التفاعل

- The code will generated automatically in the (background) توليد الكود في الخلفية (
- Information will generated automatically so the programmer can understand the flow of the program without the need to look at the code توليد المعلومات التي تمثل الكود وتجعلنا قادرين على متابعة سير البرنامج بدون الحاجة الى النظر الى الكود

The question now, what is new over the legacy code generator and wizards? السؤال الان ماهو الجديد عن مولدات الكود والمعاجات

- You don't need to look at code at all لست بحاجة للنظر الى الكود على الاطلاق
- You can modify your work without looking at code at all يمكنك تعديل عملك بدون الحاجة للتعامل مع الكود
- You can control the flow of the program where you can (Move steps up, move steps down, Copy & Paste steps without the need to look at the code at all) يمكنك التحكم في سير البرنامج واجراء عمليات النسخ واللصق بدون الحاجة للنظر الى الكود

#### Programming without coding technique

اسلوب البرمجة بدون كود



Fig. 2 (Programming without coding technique)

- عزل المبرمج عن قواعد اللغة Isolation from programming language syntax عزل المبرمج عن قواعد اللغة
  - واجهة مستخدم خاصة بلغة انسانية كالمعتاد (Custom User Interface (Human Language) واجهة مستخدم خاصة بلغة ا
- Based on Programming Language Behind the scene الاعتماد على لغة برمجة في الخلفية
- مكن استخدام أي لغة في الخلفية Use Any Programming Language Behind the scene يمكن استخدام أي
- لا حدود ولا قيود No Restrictions & Without Limitations 🗕

# The Transporter الناقل

In Programming world, there is Low Level Programming Languages and High Level Programming Languages, Also in programming without coding technology which presents new Generation of programming languages (Interactive Languages) there is Low Level RPWI and High Level RPWI Languages

في عالم البرمجة هناك لغة منخفضة المستوى وعالية المستوى و هذه مقارنة نسبية بين اللغات وكذلك في تكنولوجيا البرمجة بدون كود التي تقدم جيل جديد من لغات البرمجة و هو اللغات التفاعلية هناك لغات برمجة بدون كود منخفضة المستوى واخرى عالية المستوى

RPWI means " (R)eal (P)rogramming (W)ithout cod(I)ng ", Where you don't need to write code, or to study programming language syntax because you develop your software in RPWI Environment through interaction, i.e. GUI instead of writing Code.

Low Level RPWI requires from the developer/programmer to know programming concepts, and requires that you understand the features and rules presented by the programming language under usage because the interactive language just present GUI

(in human language) to all features available from the programming language under usage.

اللغات التفاعلية المنخفضة المستوى في البرمجة بدون كود تعتمد على فهم مستخدمها لتفاصيل فنية عن لغة البرمجة المستخدمة في الخلفية

Also all Components (Servers/Transporters) available in interactive language which is Low Level RPWI, will be like direct interface to features available by the programming language, so the code generated from any component (Server/Transporter) will do a job that may not make sense in the general application, but only the developer/programmer who uses the component can understand the generated code.

High Level RPWI doesn't require from the developer/programmer to know programming concepts, no need to know the rules of the programming language under usage, because here the interactive language that is High Level RPWI, provides GUI (in human language) + components (Servers/Transporters) which generates code which do expected job anyone can fell with it and make a sense in the general application under development.

اللغات التفاعلية عالية المستوى في البرمجة بدون كود تخاطب المستخدم ولاتتطلب فهم لتفاصيل فنية كثيرة.

Transporter, this name because it's used for transporting the programming language to RPWI Environment.

Transporter differs from the wizard and code generators, its upgrade to them because transporters work together in solving the same problem which maximize the power and free the space to an infinite number of applications that we can develop which provide us with unlimited and general purpose programming environment.

# Programming without coding technology architecture معمارية تكنولوجيا البرمجة بدون كود



Fig.3 (Programming without coding technology architecture)

- (1) Programming without coding layer طبقة البرمجة بدون كود
  - a. Mahmoud Programming Language
  - b. RPWI Environment
  - c. DoubleS (Super Server) Paradigm
- طبقة البرمجة بالكود Coding Layer (2)
  - a. HarbourMiniGUI Extended (GUI Framework)
  - b. Harbour/xHarbour Compiler
  - c. Borland C/C++ Compiler

# How to get Programming without coding technology? كيفية الحصول على تكنولوجيا البرمجة بدون كود

You can download programming without coding technology from URL: <u>http://www.sourceforge.net/projects/doublesvsoop</u> It's Free and Open Source.

انها مجانية ومفتوحة المصدر يمكنك الخصول عليها من الموقع الخاص بها والمذكور اعلاه

#### The tools used for building the technology

الادوات المستخدمة في بناء تكنولوجيا البرمجة بدون كود

- 1 Microsoft Visual FoxPro 9.0 SP2
- 2 HarbourMiniGUI Extended (GUI Framework)
- 3 Harbour/xHarbour Compiler
- 4 Borland C/C++



# Mahmoud Programming Language

# مقدمة Introduction

*M*ahmoud programming language is the first general purpose interactive (Based on interaction through GUI instead of writing code) programming Language developed and hosted in the RPWI Environment.

لغة البرمجة محمود هي اول لغة برمجة عامة تفاعلية تم تطوير ها واستضافتها داخل بيئة البرمجة بدون كود

This language is a good example about what we can do inside RPWI Environment, where we can develop and use interactive languages in a Very easy manner, so you can develop your own programming language That carry your name (or any other name you like), and you can hack Mahmoud programming language and start doing whatever change you like to do.

اللغة عبارة عن مثال لما يمكن عمله داخل بيئة البرمجة بدون كود حيث يمكن تطوير واستخدام اللغات التفاعلية بطريقة بسيطة جدا ولذلك يمكنك تطوير لغة البرمجة التفاعلية الخاصة بك التي تحمل اسمك او اي اسم اخر تجده مناسبا ويمكنك اختراق لغة البرمجة محمود والبداية بعمل التعديلات التي تريدها.

The Language provides us with great power from the ability to develop console applications to GUI applications and from simple mathematics applications to complex applications including database applications from desktop to the network.

The language power are not limited or restricted, it's open architecture where you can extended the language by adding new components using RPWI Environment designers and/or you can use extension components that enable you to call DLL functions, use COM objects and/or do OLE Automation.

Now we are going to learn how to use this Modern programming language to explore its features and simply present its power.

اللغة تقدم العديد من الملامح الجيدة التي تجعلها لغة بسيطة وقوية في نفس الوقت.

# Hello World:-

- (1) **Procedure**
- (2) Screen Shots
- (1) Procedure:-
- Run Programming without coding technology software
- Wait to see the logo screen
- Click "ok" to close the about window
- Click New
- Select "Console Application without coding"
- Click "New"
- Determine the file name (\*.SSF)
- Select Goal Designer
- Click "Interact" button
- Select Domain (Console Applications)
- Select Component (Basic Input/Output)
- Click ok
- Check (Print text on new line)
- Write the text for displaying on the screen
- Click "ok" button
- Select the first step
- Click "Interact" button
- Select Domain (Console Applications)
- Select Component (Wait Key/Seconds)
- Click "ok" button
- Check "wait n seconds"
- Determine the number of seconds to wait
- Click ok
- Run the program
- Wait for saving & building the application
- Have fun Seeing the application in the runtime

This long procedure requires less than 30 seconds and it's very easy to learn and remember, is it?

#### (2) Screen shots:-



Run Programming without coding technology software



Wait to see the logo screen



Click "ok" to close the about window

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Click "Interact" button

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Select the first step then Click "Interact" button



# Select Domain (Console Applications) then Select Component (Wait Key/Seconds) then Click "ok" button

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Check "wait n seconds" then determine the number of seconds to wait them click ok

м	RPW	I Envir	onmen	t (Goa	al De	signer	) - Prog	rammi	ing wit	hout	codir	ng te	chnol	ogy										0 <b>-</b> 2	3
M	File	Edit	Data	Co	de	Veto	RPWI	Tran	isporte	r P	ackag	e T	ools	Help		_	_	_	<b>—</b>					- 5	×
	U	<b>~</b>	H	*	Ð		Y	к	L	M	N	0	Р	Q	S	Р	D	F			<u> </u>				
L	5	Goa	al :	Ma	in												•		GU	d Bu	uild &	Run HS	ig	ne	ľ
Pro-		Start	Point (	NOT	STEF	P)\The	First S	ep																2	-
ľ		Ste	ps Tre	e S	Step I	Detail	6				U	se .	Any	/ Pro	ogra	ımn	ning	La	ingu	age	Be	hind	the	scer	ne
Goal		Start I	Point (N The F	NOT S First S Prin WAI	tep t Tex T (SE		V LINE) DS)	"Hello	o World	j"															
Transporter																									
nteraction		10	lew Ste	ep	<b></b>	Delete	Step		[] In	terac	*					9	sí N						C	<u> </u>	_
			Edit St	ep )				E	Igno	re (C	isabl	e) St	ep			Mod	ify		Forn	n Des	igner		Clo	ose	
Ju	RL: h	ttp://w	ww.sou	rcefor	ge.ne	t/proje	ects/dou	olesvso	oop (Fre	e - C	pen S	ource	) - 200	06-2008	, Mahr	moud	Fayed								

Run the program

Building Application		
Time : 10:59:50 Date Programming without codi URL : http://www.sourcei	: 07/02/2008 ng technology 1.0 (Stable) Rev. 8 Forge.net/projects/doublesvsoop	*
Programming Language Programming Environment Programming Paradigm	: Mahmoud Programming Language : RPWI ( [R]eal [P]rogramming [W]ithout cod[I]ng) : DoubleS (Super Server)	
Compilers GUI Framework	: Borland C/C++ & Harbour/xHarbour : HarbourMiniGUI Extended	
		•
	Ok	

Wait for saving & building the application



Have fun seeing the application in the runtime

# Setting Colors & Clearing Screen:-

Simply we can set the colors of our application

The **standard** colors used for all screen output, while the **enhanced** colors used for Getting input and highlights while the **unselected** colors used for the unselected input lines

Black	Blue	Green	Cyan
Red	Magenta	Brown	White
Gray	Bright Blue	Bright Green	Bright Cyan
Bright Red	Bright Magenta	Yellow	Bright White

Available Colors:-

### Component Address:-

- Domain (Console Application)
- Component (Set Color)

# Screen Shots:-



Set color – Component address

Standard ForeColor	Brown	BackColor	Black	
	White		Blue	
	Gray	-	Green	×
nhanced ForeColor	Black	BackColor	Brown	×
	Blue		White	
	Green	•	Gray	*
Unselected ForeColor	Brown	▲ BackColor	Cyan	
	White		Red	
	Gray	÷	Magenta	*
		1		

Set color – interaction page

Goal :	Main	•	<b>Goal Designer</b>
Start Point	(NOT STEP)\The First St	ер	
Steps Tr	ee Step Details	Custom User	Interface (Human Language)
Start Point (	NOT STEP) First Step Set Color Standard( W	/hite , Blue ) Enhanced ( Black , White ) Unselected ( Wh	iite , Red )
New S	tep 🖉 Delete Step	Interact Ignore (Disable) Step Modify	Form Designer Close

Set color – Interaction Result

Now we are going to clear the screen using the selected color Component Address: Domain (Console Application) Component (Basic Input/output)

FILE( C.\SSRPWI	DOUBLES\RPWI1	DFIIDF300	.IDF)					
Console Mo	ode							· · · ·
Clear Screen								
ROW	0	COL	0	ROW2	24	COL2	79	
ROW	0	COL	0	ROW2	24	COL2	79	
ROW	0	COL	0	ROW2	24	COL2	79	
Color	"W/B"			1				<u>۔</u> ار
K			PAGE1			Again	Ok	Cancel
			Clearir	ng scre	een			

Start Point (NOT STEP)	
The First Sten	
Set Color Standard (White , Blue ) Enhanced (Black , White ) Unselected (White , Red	)
Clear Screen	

The result of interaction process

Now after selecting colors and clearing screen we can do as in the first example, printing text then waiting for number of seconds.

Start Point (NOT STEP)	
- The First Step	
Print Text (NEW LINE) "Colors change the world" WAIT (SECONDS)	

i

Our steps tree include setting colors, clearing screen, printing text & waiting



The final application

# Clearing a rectangle area, drawing a box

We can clear a rectangle area on the screen by filling it with space characters and using standard color setting

Also we can draw a box around a rectangle area.

Component Address:

- Domain Name (Console Application)
- Component Name (Basic Input/output)

#### Example:

We are going to clear a rectangle area using the blue color Then drawing a box around this area using the white color

Row/Top	5
Column/Left	5
Bottom	10
Right	20

#### Screen Shots:-

🔽 Draw Box

🔲 Draw Double Box

ROW

ROW

M

FILE( C:\SSRPWI\DO	UBLES\RPWI1\IDF\IDF302.IDF)		
Set Color			
Standard ForeColor	Magenta Brown White	BackColor	Black Blue Green
Enhanced ForeColor	Black Blue Green	BackColor	Black Blue Green
Unselected ForeColor	Black Blue	BackColor	Black Blue
	Page1	ing color	Again Ok Cancel
FILE( C:\SSRPWI\DO	UBLES\RPWI1\IDF\IDF300.IDF)		
Console Mod	e		-
Clear Screen			
✓ Clear Region ROW	5 <sup>COL</sup> 5	R0W2	10 <sup>COL2</sup> 20

•

Clearing the rectangle region then drawing a box

PAGE1

ROW2

R0W2

10

24

•

COL2

COL2

Again

20

79

Ok

•

Cancel

COL

COL

5

0

M

5

0

•

•

FILE( C:\SSRPWI\DOUBLE	SIRPWI1NDFNDF301.IDF)
Wait	<u>▲</u>
🔲 Wait Key , Message :	"Text Here"
✓Wait nSeconds	3
L	
	-
•	
	PAGE1 Again OK Cancel

Waiting for number of seconds



The final steps tree



The final application

#### Variables Assignment:-

All types can be assigned to named variables Named variables can be 1 to 63 characters long identifiers, starting with  $[A-Z]_{-}$  and further consisting from additional  $[A-Z]_{0-9}$  characters, up to 63 characters, which are not case sensitive.

Assignment is not more than Left Side (Variable Name) = Right Side (Value) Like in Math

Component Address:-Domain (Variables) Component (Assignment)

Example:-

We declare two variables the first is (Name) and its value is (Mahmoud) While the second are (Age) and its value is (21).

Then we display the values of the variables As we do in displaying a string on the screen But variables names written directly without double coition

Domain (Variables) - Component (Assignment)

FILE( C:\SSRPWIN	DOUBLES\RPWI1\IDF\IDF403.IDF)		
Assignment			<u> </u>
Left Side	Name		-
Right Side	"Mahmoud"		
Туре	Value Length of String Length of Numeric		
•			•
K	< ► ► Page1	Again	Ok Cancel

Interaction Page of the assignment component

Since we need to use the same component more than one time Then we click "Again" button instead of clicking "Ok" button

FILE( C:\SSRPWI\DO	UBLES\RPWI1\IDF\IDF403.IDF)
Assignment	<u> </u>
Left Side	Age
Right Side	21
Туре	Value Length of String Length of Numeric
•	
	▶ ▶ page1 ▼ Again Ok Cancel

Interaction Page of the assignment component

art Point (NOT STEP)	
👌 🛶 The First Step	
Name = "Mahmoud"	
Age = 21	

#### The result of the interaction

FILE( C:\SSRP	WIDOUBLESIRPWI1IDFIDF300.IDF)	
IVI Print Test (Ne	sw Line)	-
Text	Name	
🔲 Print Text (At	Row and Column)	
ROW	3 <sup>COL</sup> 3	
Text	"Text Here"	
🔲 Get input (At	Row and Column)	
ROW	3 <sup>COL</sup> 3	-
Variable		
T		· · · · · · · · · · · · · · · · · · ·
	PAGE1	Again Ok Cancel

Interaction Page

FILE( C:\SSRPV	WI/DOUBLES/RPWI	NDFNDF300.	DF)			
Print Text (Nev	w Line)					<b>_</b>
Text	Age					22
Print Test (At P	Row and Column)					
ROW	3	COL	3			
Text	"Text H	ere"				
🔲 Get input (At P	low and Column)					-0
ROW	3	COL	3			_
Variable						
4						- -
K	•		PAGE1	Again	[Ok	Cancel

Interaction Page

Start Point (NOT STEP)	
- The First Step	
Name = "Mahmoud"	
Age = 21	
Print Text (NEW LINE) Name	
Print Text (NEW LINE) Age	

#### Interaction Page

FILE( C:\SSRPWI\DOUBLES)	RPWI1\IDF\IDF301.IDF)			
Wait				<b>^</b>
🔽 Wait Key , Message :	"Press any key to co	ntinue"		
Wait nSeconds	3			_
				<u>.</u>
<u> </u>				<b>b</b>
	PAGE	1 💌	Again Ok	Cancel
	Inter	action Page		
Start Point (NOT STEP)				
Name = "Mahm 	oud"			
Print Text (NEW	LINE) Name LINE) Age			
Wait (KEY)				

The final – Steps Tree



The final application

#### Strings:-

Component Address:

- Domain (Variables)
- Components
  - UPPER case
  - o lower case
  - o All trim
  - Left trim
  - $\circ \quad \text{Right trim} \quad$
  - Sub String
  - Replicate String
  - Sub String transform
  - $\circ \quad \text{Get position of substring} \\$
  - o Get String/Variable/Array Length

#### Upper Case:

Returns a copy of the string with all alphabetical characters converted to uppercase All other characters remain the same as in the original string

Example - Screen Shots:-

FILE( C:\SSRPW	NDOUBLES\RPWI1\IDF\IDF403.IDF	)			
Assignmen	t				<b>_</b>
Left Side	Name				-
Right Side	"mahmoud"				
Туре	Value	*			
	Length of String Length of Numeric	Ţ			-11 51. -11
•					
K		page1	<b>•</b>	Again (O	Cancel

Setting variable Name = "mahmoud"



Domain (Variables) – component (UPPER Case)

FILE( C:\SSRPWI\DOUBLES\R	PWI1\IDF\IDF407.IDF)		
Convert String Letter	s to Upper Case		<u> </u>
Input - String (Data / Variable)	name		
	name		_
1			<u> </u>
	PAGE 41	▼ Again	Ok Cancel

input variable name = output variable name = name

FILE( C:\SSRPWI	DOUBLES/RPWI1/IDF/IDF3	00.IDF)			
100	0	0	24	79	<b>^</b>
Set Color					
Color	"W/B"				
Print Text					
Text	"Text Here"				
☑ Print Text (New	Line)				
Text	name				
🔲 Print Text (At Ro	w and Column]	1			
ROW	3 COL	3			 ۲
K		PAGE1	•	Again	Ok Cancel

Printing the value of the variable name on the screen

FILE( C:\SSRPWI\DOUBLE	SIRPWI1IDFIDF301.IDF)
Wait	<u>▲</u>
🕅 Wait Key , Message :	"Text Here"
✓ Wait nSeconds	3
L	
	Waiting for 3 seconds

rt Point (NOT STEP)
] The First Step
Name = "mahmoud"
name = CONVERT String name To UPPER CASE
Print Text (NEW LINE) name
WAIT (SECONDS)

The final steps tree



The final application

#### Lower case:

Returns a copy of the string with all alphabetical characters converted to lowercase All other characters remain the same as in the original string

Example - Screen Shots:-

FILE( C:\SSRPWI\E	OUBLES\RPWI1\IDF\IDF403.IDF)	
Assignment		<u> </u>
Left Side	MYSTR	
Right Side	"I LIKE PROGRAMMING"	
Туре	Value	
	Length of String Length of Numeric	
		• •
	page1	Again Ok Cancel
	declare variable mystr = "]	LIKE PROGRAMMING"

User Interface User Interface Underwork User Interface Underwork Underwork User Interface Underwork User Interface User Inter	String To Numeric Date To String	[
Events Classes Main Menu Status Bar Toolbar Drawing Console Application Sound Programming Basics Control Structure	Get Date Get Time ALL Trim Left Trim Right Trim Sub String Replicate String Sub String Transform Get Position of Sub String ASCII code to Character	
Variables	- Character to ASCII Code	

Domain (Variables) Component (lower case)

FILE( C:\SSRPWI\DOUBLES\R	WI1\IDF\IDF408.IDF)
Convert String Letter	s to Lower Case 🛁
Input - String (Data / Variable)	MYSTR
Output - Variable	MYSTR
	-1
4	
	PAGE (1 Again Ok Cancel

Interaction page – input variable name = output variable name = MYSTR

Print Text (New Li Text	ne)		
Text	225		
	MYSTR		
Print Text (At Row	rand Column)		
łow	3 <sup>COL</sup> 3		
ext	"Text Here"		
Get input (At Row	and Column)		
i0W	3 COL 3		
'ariable		(	

Display the value of the variable mystr on screen

FILE( C:\SSRPWI\DOUBLES)	RPWI1VDFVDF301.IDF)
Wait	▲
🔲 Wait Key , Message :	"Text Here"
✓ Wait nSeconds	3
-	
	-
1	• • • • • • • • • • • • • • • • • • •
	PAGE1 Again OK Cancel

Wait for 3 seconds



The final steps tree



The final application

## All trim:-

Returns the input string with all leading and trailing blank spaces removed

•

Example - Screen Shots:-

FILE( C:\SSRPWI\D	OUBLES\RPWI1\IDF\IDF403.IDF)	
Assignment		
Left Side	mystr	
Right Side	" o0o wow o0o "	
Туре	Value	_
	Length of String	
	Length of Numeric	
4		
	page1	Again Ok Cancel
Select Domain :		Components in Domain
Mahmoud	Programming Language	Assignment
Use	er Interface	Numeric To String
L L	J GUI Application	String To Numeric
	Windows	E LIPPER Case
	Controls	lower Case
	Events	Get Date
	Classes	Get Time
	Status Bar	ALL Trim
	Toolbar	Left Trim
	Drawing	Right Frim
	Console Application	Replicate String
	Sound	Sub String Transform
⊨Pro	gramming Basics	Get Position of Sub String
	Control Structure	ASCII code to Character
	Variables	Character to ASCII Code     T
Search		
		~
		(Ok) Close

Domain (Variables) – Component (All trim)

FILE( C:\SSRPWI\DOUBLES\RPWI1\DF\1DF411.IDF)					
All Trim (Removes a	l leading and trailing spaces )				
Input - String (Data / Variable)	mystr				
Output - Variable	mystr				
1					
	PAGE 41 Again Ok Cancel				

Input variable name = output variable name = mystr

FILE( C:\SSRPWI\	INDOUBLESIRPWI1I/IDF/IDF300.IDF)	
ROW	0 <sup>COL</sup> 0 <sup>ROW2</sup> 24 <sup>COL2</sup> 79	1
Set Color		
Color	"W/B"	
Print Text		-
Text	"Text Here"	
🔽 Print Text (New L	(Line)	
Text	mystr	
Print Text (At Roo	ow and Column)	<u>-</u>
4		
	Again OK	ancel

Display the value of the variable mystr on the screen

FILE( C:\SSRPWI\DOUBLE	ES\RPWI1\IDF\IDF301.IDF)
Wait	<u>▲</u>
🔲 Wait Key , Message :	"Text Here"
Wait nSeconds	3
-	
•	
	PAGE1 Again Ok Cancel
	Wait for 3 seconds



The final steps tree



The final application

#### Left trim:-

Returns the input string with all leading blank spaces removed

#### Example - Screen shots:-





FILE( C:\SSRPWI\DOUBLES\F	RPWI1/IDF/IDF412.IDF)			
Left Trim (Removes	all leading spaces )			<u> </u>
Input - String (Data / Variable)	mystr			-
Output - Variable	mystr			_
4		f		•
	PAGE 41		Again Ok	Cancel
Int	ut variable name = o	utnut variable na	me = mystr	

Input variable name = output variable name = mystr



#### The final steps tree

C:\Program Files\Mahmoud Fayed\Programming without coding technology\Ver. 1.0 (Stable) Rev. 8	
000 wow 000	<b>_</b>
	-

The final application

## Right trim:-

Returns the input string with all trailing blank spaces removed

Example - Screen Shots:-

User Interface     GUI Application     Windows     Controls     Classes     Main Menu     Status Bar     Toolbar     Drawing     Console Application     Sound     Control Structure     Variables	<ul> <li>Assignment</li> <li>Numeric To String</li> <li>String To Numeric</li> <li>Date To String</li> <li>UPPER Case</li> <li>lower Case</li> <li>Get Date</li> <li>Get Time</li> <li>ALL Trim</li> <li>Left Trim</li> <li>Replicate String</li> <li>Sub String</li> <li>Replicate String</li> <li>Sub String Transform</li> <li>Get Position of Sub String</li> <li>ASCII code to Character</li> <li>Character to ASCII Code</li> </ul>	
--	---	--

Domain (Variables) Component (Right trim)

FILE( C:\SSRPWI\DOUBLES\RPWI1\IDF\IDF413.IDF)
Right Trim (Removes all trailing spaces )
Input - String (Data / Variable) mystr
Output · Variable mvstr
Again Cancel
Input variable name = output variable name = mystr
Plat Paint (NOT STEP)
mystr = 000 wow 000
Print Text (NEW LINE) mystr
WAIT (SECONDS)

The Final Steps tree



The final application

### Sub String:-

Extract a substring from a character string

#### Example – Screen Shots:

Doamin (Variables) Component (Sub String)

FILE( C:\SSRPWI\DOUBLES\	RPWI1\IDF\IDF414.IDF)		
Get Sub String			<u> </u>
Input (Data/Variable)	mystr		
Start Position (Number/variable)	1		
Count (Number/Variable)	6		_
Output (Variable)	mystr		
•1	1		* •
	PAGE1	•	Ok Cancel
	Interaction Pa	ge	
Start Point (NOT STEP)			
mystr = " o0o y mystr = Sub Strir	/ow o0o " g of mystr From 1 Count 6		
Print Text (NEW I WAIT (SECONDS	.INE) mystr ទ)		

The final steps tree



The final application

## **Replicate String**

Returns a string repeated a specified number of times

#### Example - Screen Shots:



`

Domain (Variables) Component (Replicate String)

FILE( C:\SSRPWI\DO	UBLES\RPWI1\IDF\IDF415.IDF	)				
Replicate Strin	ıg					<b>_</b>
Input (String/Variable)	mystr					
Count	3					
Output (Variable)	mystr					_
4						- -
		PAGE1	•	Again	Ok	Cancel
		Interaction Page		25		



#### The final steps tree

CIV.	C:\Prog	ram Fil	es\Mahmoud Fayed	I\Prog	ramm	ing without co	oding techno	ology\	Ver. 1.0 (Stable) Rev. 8
	oØ0	wow	000	oØo	wow	000	000	wow	000
									-

The final application

### Sub String transform

Search and replace characters within a character string or memo field

Example – Screen Shots:

User Interface User	Numeric To String         String To Numeric         Date To String         UPPER Case         lower Case         Get Date         Get Time         ALL Trim         Left Trim         Right Trim         Sub String         Replicate String         Sub String Transform         Get Position of Sub String         ASCIL code to Character	
Variables	Character to ASCII Code	

Domain(Variables) – Component (Sub String Transform)

FILE( C:\SSRPWI\DOUBLES	RPWI1\IDF\IDF416.IDF)			
Sub String Transfo	rm			<u>^</u>
String /variable	mystr			
Sub String - to search	"000"			
Replace With (String/Variable)	"_*_"	8		-
Output (Variable)	mystr			
ļ	myəu			
4				<u> </u>
		PAGE1	Again	Ok Cancel
	Iı	nteraction Page		



Final Steps Tree