**ITEC397 Chapter 05 LABWORK**

1. **String concatenation**
* Open a macro-enabled Excel sheet, go to developer Tab, open the Visual Basic editor, if it is not created, create a module (module1)
* Create a sub routine named example\_05\_01
* Assign your name to the variable ‘u\_name’
* Print the output “Hello “ & u\_name

***Solution***

*Sub example\_005\_01()*

 *u\_name = "Cem Yagli"*

 *MsgBox "Hello " & u\_name*

*End Sub*

1. **Splitting String with Mid function**
* Create a subroutine named as example\_05\_02
* With using the Mid function, split and display my name “Cem Yagli” from the string “A05+22Hello Cem Yagli 89Red”

**Solution**

*Sub example\_005\_02()*

 *s\_text = "A05+22Hello Cem Yagli 89Red"*

 *MsgBox Mid(s\_text, 13, 9)*

*End Sub*

1. **Splitting String with Left and Right functions**
* Create a subroutine named as example\_05\_03
* With using the Left function, split and display my name “Cem Yagli” from the string “*Cem Yagli 89Red*”
* With using the Right function, split and display my name “Cem Yagli” from the string “*A05+22Hello Cem Yagli"*”

**Solution**

*Sub example\_005\_03()*

 *s\_text = "Cem Yagli 89Red"*

 *MsgBox Left(s\_text, 9)*

 *s\_text = "A05+22Hello Cem Yagli"*

 *MsgBox Right(s\_text, 9)*

*End Sub*

1. **The use of LCase and UCase functions**
* Create a subroutine named as example\_05\_04
* Assign the text “Hello World, Stay Home Be Safe” to the variable s\_text
* Display the content of s\_text as in **UPPERCASE**
* Display the content of s\_text as in **smallcase**

**Solution**

*Sub example\_005\_04()*

 *s\_text = "Hello World, Stay Home Be Safe"*

 *MsgBox UCase(s\_text)*

 *MsgBox LCase(s\_text)*

*End Sub*

1. **Searching Strings**
* Create a subroutine named as example\_05\_05
* Assign the text “Hello World, Stay Home Be Safe” to the variable s\_text
* Display the length of the s\_text
* Search the string “Stay Home” within s\_text and display its position
* Search the string “Have Party” within s\_text and display its position
* Do case insensitive search the string “stay home” within s\_text and display its position

**Solution**

*Sub example\_005\_05()*

 *s\_text = "Hello World, Stay Home Be Safe"*

 *MsgBox Len(s\_text)*

 *MsgBox InStr(s\_text, "Stay Home")*

 *MsgBox InStr(s\_text, "Have Party")*

 *MsgBox InStr(1, s\_text, "stay home", vbTextCompare)*

*End Sub*

1. **The use of Int, CInt, Clng, CDbl, and Val functions**
* Create a subroutine named as example\_05\_06
* Assign the text “10.99” to the variable s\_text
* Display the Int(s\_text)
* Display the CInt(s\_text)
* Display the CDbl(s\_text)
* Assign the text “10.99Cem” to the variable s\_text
* Display the Val(s\_text)
* Display the Int(“Give me an error”)

**Solution**

*Sub example\_005\_06()*

 *s\_text = "10,99"*

 *MsgBox Int(s\_text)*

 *MsgBox CInt(s\_text)*

 *MsgBox CDbl(s\_text)*

 *MsgBox Val("10.99Cem")*

*End Sub*

1. **The use of Chr function**
* Create a subroutine named as example\_05\_07
* Assign the text “Hello ” & Chr(13) & “World” to the variable s\_text
* Display the s\_text
* Assign the text “Hello ” & Chr(13) & “World” & Chr(153) to the variable s\_text
* Display the s\_text

**Solution**

 *Sub example\_005\_07()*

 s\_text = "Hello " & Chr(13) & "World"

 MsgBox s\_text

 s\_text = "Hello " & Chr(13) & "World" & Chr(153)

 MsgBox s\_text

 *End Sub*

1. **The use of FORMAT function**
* Create a subroutine named as example\_05\_08
* Assign the text “123456789.1234” to the variable s\_text
* Display the s\_text
* Format(s\_text, “Currency”);
* Format(s\_text, "Scientific")
* Format(s\_text, "#,###.### TL")
* Assign the text (negative number test) “-123456789.1234” to the variable s\_text
* Format(s\_text, "#,###.### TL; (#,###.### TL)")

**Solution**

 *Sub example\_005\_08()*

 *s\_text = "123456789,1234"*

 *MsgBox s\_text*

 *MsgBox Format(s\_text, "Currency")*

 *MsgBox Format(s\_text, "Scientific")*

 *MsgBox Format(s\_text, "#,###.### TL")*

 *s\_text = "-123456789,1234"*

 *MsgBox Format(s\_text, "#,###.### TL; (#,###.### TL)")*

*End Sub*

1. **The use of Date – Time FORMAT function**
* Create a subroutine named as example\_05\_09
* Display the system date time
* Display the system date in predefined “Long Date” format
* Display the system date in predefined “Short Date” format
* Display the system time in predefined “Long Time” format
* Display the system time in predefined “MediumTime” format
* Display the system date in user defined "(hh:nn:ss am/pm) dd/mm/yyyy" format

**Solution**

Sub example\_005\_09()

 MsgBox Now

 MsgBox Format(Now, "Long Date")

 MsgBox Format(Now, "Short Date")

 MsgBox Format(Now, "Long Time")

 MsgBox Format(Now, "Medium Time")

 MsgBox Format(Now, "(hh:nn:ss am/pm) dd/mm/yyyy")

End Sub

1. **The use of DateAdd function**
* Create a subroutine named as example\_05\_10
* Display the system date time
* Display the date 2 months after today
* Display the date 2 quarters after today

**Solution**

Sub example\_005\_10()

 MsgBox Now

 MsgBox DateAdd("d", 2, Now)

 MsgBox DateAdd("q", 2, Now)

End Sub

1. **The use of DatePart function**
* Create a subroutine named as example\_05\_11
* Write the required code which has to use the system date-time value and display a message as “We are on the dd day of the Month”

**Solution**

Sub example\_005\_11()

 s\_text = "We are on the " & DatePart("d", Now) & " of the "

 Select Case DatePart("m", Now)

 Case 1

 s\_text = s\_text & "January"

 Case 2

 s\_text = s\_text & "February"

 Case 3

 s\_text = s\_text & "March"

 Case 4

 s\_text = s\_text & "April"

 Case 5

 s\_text = s\_text & "May"

 Case 6

 s\_text = s\_text & "June"

 Case 7

 s\_text = s\_text & "July"

 Case 8

 s\_text = s\_text & "August"

 Case 9

 s\_text = s\_text & "September"

 Case 10

 s\_text = s\_text & "October"

 Case 11

 s\_text = s\_text & "November"

 Case 12

 s\_text = s\_text & "December"

 End Select

 MsgBox s\_text

End Sub

1. **The use of DateDiff function**
* Create a subroutine named as example\_05\_12
* Write the required which has to calculate the number of days passed since the date 1st of January 2020 and print as a message.

**Solution**

*Sub example\_005\_12()*

 *MsgBox DateDiff("d", "01/01/2020", Now)*

*End Sub*

1. **The use of DatePart function**
* Create a subroutine named as example\_05\_13
* Write the required code which it has to use the system date-time and to display “Now we are in **season**”, where the season is the season name (Spring, Summer, Fall, Winter) as a message.

**Solution**

**Note that:** *DatePart("q",now) is giving the value that we are in which quarter of the year that is needing 1 month addition to turn to the season information. Hence DateAdd("m", 1, Now) is used for adding 1 month to now.*

*Sub example\_005\_13()*

 *s\_text = "We are in "*

 *Select Case DatePart("q", DateAdd("m", 1, Now))*

 *Case 1*

 *s\_text = s\_text & "Winter"*

 *Case 2*

 *s\_text = s\_text & "Spring"*

 *Case 3*

 *s\_text = s\_text & "Summer"*

 *Case 4*

 *s\_text = s\_text & "Fall"*

 *End Select*

 *MsgBox s\_text*

*End Sub*

1. **The use of DatePart function 2**
* Create a subroutine named as example\_05\_14
* Write the required will use your date and to display “You have been birth on **xxxxxx**”, where xxxxxx is the name of the day (Sunday, Mondy, … as a message.

**Solution**

*Sub example\_005\_14()*

 *s\_text = "You have been being birth on "*

 *Select Case DatePart("w", "05/04/2020")*

 *Case 1*

 *s\_text = s\_text & "Sunday"*

 *Case 2*

 *s\_text = s\_text & "Monday"*

 *Case 3*

 *s\_text = s\_text & "Tuesday"*

 *Case 4*

 *s\_text = s\_text & "Wednesday"*

 *Case 5*

 *s\_text = s\_text & "Thursday"*

 *Case 6*

 *s\_text = s\_text & "Friday"*

 *Case 7*

 *s\_text = s\_text & "Saturday"*

 *End Select*

 *MsgBox s\_text*

*End Sub*

1. **The use of Weekday function**
* Create a subroutine named as example\_05\_15
* Assume that the daily payment is 100 TL. So write a code to calculate the salary of a worker who worked between these two dates “02/03/2020”-“03/04/2020”.

**Solution**

**Hint:** *First you have to count the week days that the worker is worked, then you have to multiply it with 100 TL.*

*Sub example\_005\_15()*

 *worked\_day = 0*

 *For n = DateValue("02/02/2020") To DateValue("03/04/2020")*

 *If Weekday(n) <> 1 Or Weekday(n) <> 7 Then ' Not Sunday or Saturday*

 *work\_day = work\_day + 1*

 *End If*

 *Next n*

 *MsgBox Format(work\_day \* 100, "###,### TL")*

*End Sub*

1. **The variety of uses of Message Boxes**
* Create a subroutine named as example\_05\_16
* Display the “Hello world” message as in:
	+ Standard way
	+ Critical message
	+ Exclamation message
	+ Information message
	+ Question

**Solution**

*Sub example\_005\_16()*

 *MsgBox "Hello World"*

 *MsgBox "Hello World", vbCritical*

 *MsgBox "Hello World", vbExclamation*

 *MsgBox "Hello World", vbInformation*

 *MsgBox "Hello World", vbQuestion*

*End Sub*

1. **The use of Message Boxes as Choice Boxes**
* Create a subroutine named as example\_05\_17
* Ask user his/her choice as (Yes or No) with Title “User Choice” and question string “Enter your choice” and display message as “User said YES” or “User said NO”

**Solution**

*Sub example\_005\_17()*

 *u\_ch = MsgBox("Enter Your Choice", vbYesNo Or vbQuestion, "User Choice")*

 *If u\_ch = vbYes Then*

 *MsgBox "User said YES", vbInformation*

 *Else*

 *MsgBox "User said NO", vbInformation*

 *End If*

*End Sub*