

Selection (Conditional) statement : أمر الاختيار

A selection statement provides the means of choosing between two or more execution paths in a program.

أمر الاختيار يعني عملية إختيار تنفيذ أمر واحد فقط من ضمن أمرين أو أكثر.

If statement

In this example we compare between two variable by (if) statement , if the condition is true it will executes the sentence below it, if not it will go to check the next condition .

في هذا المثال قارنا بين متغيرين بواسطة جملة الشرط (if) إذا تحقق الشرط سوف يطبع جملته وإذا لم يتحقق ذهب إلى الشرط التالي .

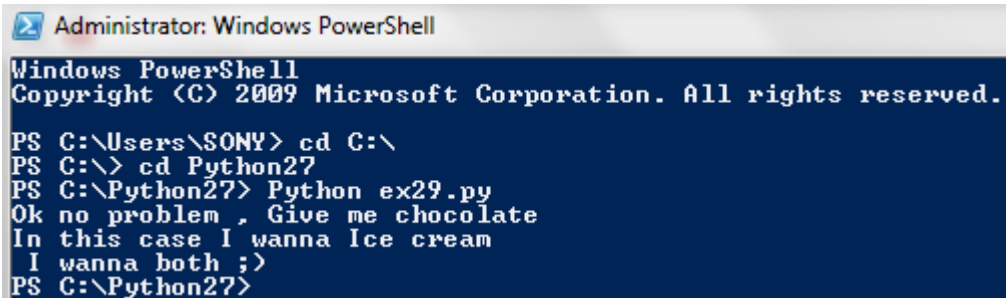
We use here :

Ice_cream +=1, that's like Ice_cream=Ice_cream+1

Ex29.py

```
1 Ice_cream = 14
2 chocolate = 15
3 cake = 15
4
5 if Ice_cream > chocolate:
6     print "Give me Ice cream ;)"
7
8 if Ice_cream < chocolate:
9     print "Ok no problem , Give me chocolate"
10
11 Ice_cream += 1
12 if Ice_cream == chocolate:
13     print "In this case I wanna Ice cream"
14
15 if cake <= chocolate:
16     print " I wanna both ;)"
```

Output :



```
Administrator: Windows PowerShell
Windows PowerShell
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PS C:\Users\SONY> cd C:\
PS C:\> cd Python27
PS C:\Python27> Python ex29.py
Ok no problem , Give me chocolate
In this case I wanna Ice cream
 I wanna both ;>
PS C:\Python27>
```

if...else statement: executes some code only if a specified condition is true and another code if the condition is false.

If...else هذا الأمر ينفذ الأمر المطلوب تنفيذه فقط لو كان الشرط صحيحا أما اذا كان خاطئا فيتم تنفيذ الأمر الآخر.

ex30a.py

```
ex30a.py
1   A = "Amwaj"
2   R = "Reem"
3
4   if A==R:
5       print"you will get iPhone 6"
6
7   else:
8       print"you will get Galaxy4 "
9
10
```

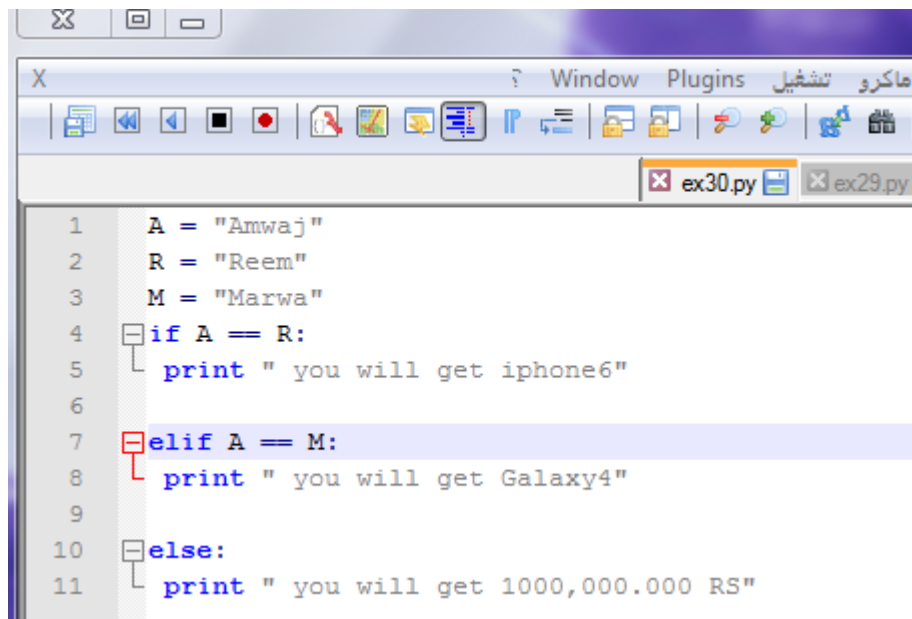
output

```
PS C:\Users\help> cd C:\
PS C:\> cd Python27
PS C:\Python27> python ex30a.py
you will get Galaxy4
PS C:\Python27>
```

if...elseif....else statement : specifies a new condition to test, if the first condition is false.

If...elseif...else هذا الأمر يسمح باختبار أكثر من شرط فهو ينفذ الأمر المطلوب تنفيذه لو كان الشرط الأول صحيحا أما اذا كان خاطئا فيتم اختبار الشرط الثاني لو كان صحيحا يتم تنفيذ الأمر أما اذا كان خاطئا فيتم تنفيذ أمر آخر.

ex30.py

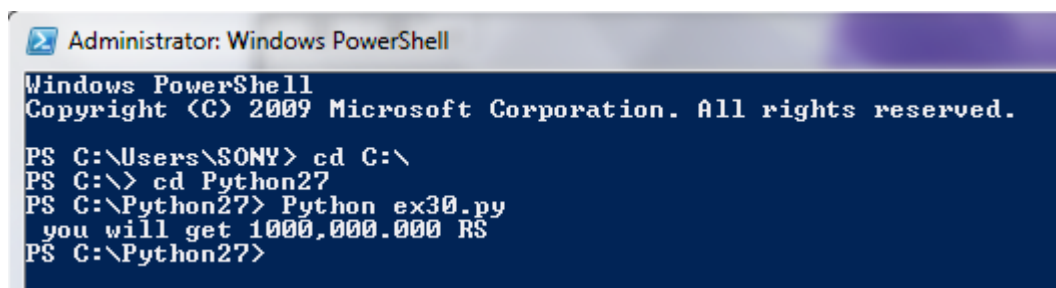


The screenshot shows a code editor window with a menu bar containing 'X', 'Window', 'Plugins', and Arabic text. Below the menu is a toolbar with various icons. The editor displays a Python script with the following code:

```
1 A = "Amwaj"
2 R = "Reem"
3 M = "Marwa"
4 if A == R:
5     print " you will get iphone6"
6
7 elif A == M:
8     print " you will get Galaxy4"
9
10 else:
11     print " you will get 1000,000.000 RS"
```

The script is saved in a file named 'ex30.py'.

Output:



The screenshot shows a Windows PowerShell terminal window titled 'Administrator: Windows PowerShell'. The terminal displays the following commands and output:

```
Windows PowerShell
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PS C:\Users\SONY> cd C:\
PS C:\> cd Python27
PS C:\Python27> Python ex30.py
you will get 1000,000.000 RS
PS C:\Python27>
```