

## HW#2

**[1] Write a program that calculates the factorial of input number and print the value as follows:**

For example if the user input the value 5 the output will be like :

$$5! = 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = 120$$

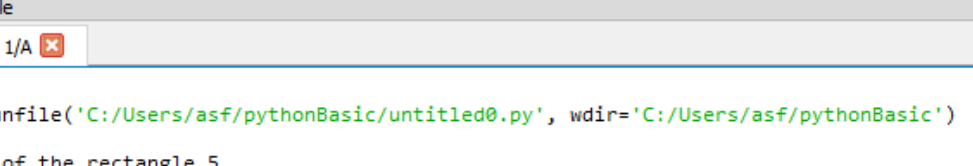
**[2] Write a program that calculate the power of input number , you must ask user to inter the base number and the exponent value :**

For example if the user input the value 5 for base and 3 for exponent the output will be like :

$$5^3 = 5 * 5 * 5 = 125$$

**[3] Write a program that reads the width and height of the rectangle, then print the area of the rectangle and draw the tow ribs (the high and the width) in transpose way**

Hint : use a While loop for drawing



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Help    Variable explorer    File explorer

IPython console

Console 1/A

In [4]: runfile('C:/Users/asf/pythonBasic/untitled0.py', wdir='C:/Users/asf/pythonBasic')

the width of the rectangle 5

the high of the rectangle 9

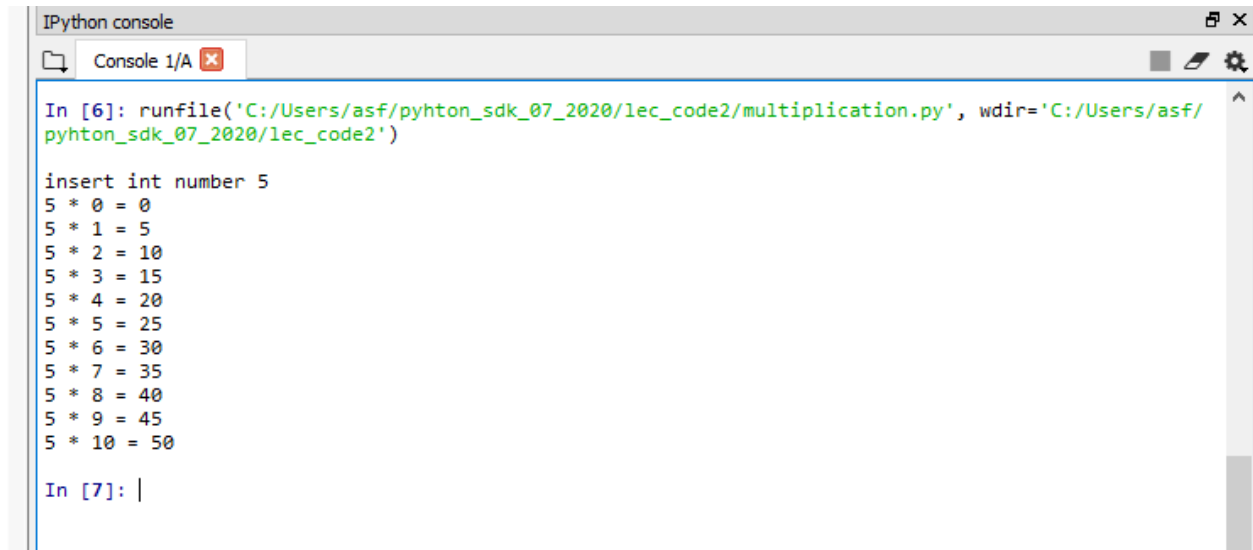
the area = 45

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In [5]: |
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[4] Read integer numbers from user until the user press [q] stop reading numbers and Print the average all numbers the user entered .

[5] By using while loop write a program that print the multiplication table for integer number read from the user as follow :



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IPython console
Console 1/A x
In [6]: runfile('C:/Users/asf/pyhton_sdk_07_2020/lec_code2/multiplication.py', wdir='C:/Users/asf/pyhton_sdk_07_2020/lec_code2')
insert int number 5
5 * 0 = 0
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
5 * 9 = 45
5 * 10 = 50
In [7]: |
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