

Exercises

Mastering Python

الدرس #2

Python's Language Basics

اساسيات لغة بايثون

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Exercises

1. Write a Python program to accept 2 numbers from the users and print the greatest
2. Write a Python program to create the multiplication table for a specific number that is accepted from the user

```
Input a number: 5
```

```
5 x 1 = 5
```

```
5 x 2 = 10
```

```
5 x 3 = 15
```

```
5 x 4 = 20
```

```
5 x 5 = 25
```

```
5 x 6 = 30
```

```
5 x 7 = 35
```

```
5 x 8 = 40
```

```
5 x 9 = 45
```

```
5 x 10 = 50
```

Exercises

3. Write a Python program to construct the following pattern, using a nested for loop.

```
*  
* *  
* * *  
* * * *  
* * * * *  
* * * *  
* * *  
* *  
*
```

Exercises

4 what is the output of this program

```
letters = ["x", "y", "z", "a", "b", "c"]
for i in letters:
    if i == "a":
        continue
    elif i=="c":
        break
    print(i)
```

5 what is the output of this program

```
for x in range(12,25,3):
    print(x)
```

Exercises

6 what is the output of this program:

```
i = 1
while i < 6:
    print(i)
    if i == 3:
        break
    i += 1
```

7 write a program to accept a number and then sum all numbers between 0 and that number.

8 write a program to input a number and print if the number is odd or even.

Exercises

9 Write a Python program to generate the following diamond using nested for Loops

```

      1
    1 2 1
  1 2 3 2 1
1 2 3 4 3 2 1
  1 2 3 4 5 4 3 2 1
    1 2 3 4 5 6 5 4 3 2 1
      1 2 3 4 5 6 7 6 5 4 3 2 1
        1 2 3 4 5 6 7 8 7 6 5 4 3 2 1
          1 2 3 4 5 6 7 8 9 8 7 6 5 4 3 2 1
            1 2 3 4 5 6 7 8 7 6 5 4 3 2 1
              1 2 3 4 5 6 7 6 5 4 3 2 1
                1 2 3 4 5 6 5 4 3 2 1
                  1 2 3 4 5 4 3 2 1
                    1 2 3 4 3 2 1
                      1 2 3 2 1
                        1 2 1
                          1

```

Exercises

10 Write a Python program to accept from a user an integer number and print it (use while loop and use exceptions handling to make sure that the user has entered an integer number)

11 what is the output from the following program :

try :

 a = 3

 if a < 4 :

 b = a/(a-3)

 print ("Value of b = ", b)

except(ZeroDivisionError, NameError):

 print ("\nError Occurred and Handled")



Master in Software Engineering

Hussam Hourani has over 25 years of Organizations Transformation, VROs, PMO, Large Scale and Enterprise Programs Global Delivery, Leadership, Business Development and Management Consulting. His client experience is wide ranging across many sectors but focuses on Performance Enhancement, Transformation, Enterprise Program Management, Artificial Intelligence and Data Science.