

## **Python Programming Practice - 2**

### **(Loop, statements)**

**Note – These questions are picked from various websites.**

#### **Que-1 (I)**

We have seen how loops work in python. Now let's implement and concertize our concepts.

Given a list A of numbers (integers), you have to print those numbers which are not ending with 4.

#### **Input Format**

The first line contains numbers separated by a space.

#### **Output Format**

Print the resultant array elements separated by a space. (no space after the last element)

#### **Example**

##### **Input**

2 3 5 4 7 12 14 13 24 40 14

##### **Output**

2 3 5 7 12 13 40

#### **Sample Test Cases**

	Input	Output
Test Case 1	-4 -8 9 0 12 68	-8 9 0 12 68
Test Case 2	8 2 5 3 9 0 3	8 2 5 3 9 0 3
Test Case 3	44 4 34 24 54	
Test Case 4	12 46 78 4 0 1	12 46 78 0 1
Test Case 5	23 -4 8 9 -7 1	23 8 9 -7 1
Test Case 6	0 0 4 4 1 78	0 0 1 78

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### Q-1(II)

Write an if statement that asks for the user's name via input() function. If the name is "Bond" make it print "Welcome on board 007." Otherwise make it print "Good morning NAME".

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### Q1(III)

Write a program to check whether a person is eligible for voting or not. (accept age from user)

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### Q-1(IV)

Write a program to display "Hello" if a number entered by user is a multiple of five , otherwise print "Bye".

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### Q- 2(i)

Write a Python program to convert temperatures to and from celsius, fahrenheit.

[ Formula :  $c/5 = f-32/9$  [ where c = temperature in celsius and f = temperature in fahrenheit ]

Expected Output :

60°C is 140 in Fahrenheit

45°F is 7 in Celsius

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Q-2(ii)

*Print First 10 natural numbers using while loop*

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Q-3 (I)

*Print the following pattern*

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

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Q-3 (ii)

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

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\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

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### Q-3 (iii)

*Print the following pattern using for loop*

5 4 3 2 1

4 3 2 1

3 2 1

2 1

1

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### Q-4(i)

Write a Python program to count the number of even and odd numbers from a series of numbers.

Sample numbers : numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9)

Expected Output :

Number of even numbers : 5

Number of odd numbers : 4

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### Q-4(ii)

*Display numbers from -10 to -1 using for loop*

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### Q-4(iii)

*Write a loop to find the factorial of any number*

Hint – Factorial : <https://www.mathsisfun.com/numbers/factorial.html>

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Q-5 (i)

Write a Python program to get the Fibonacci series between 0 to 50.

Note : The Fibonacci Sequence is the series of numbers :

0, 1, 1, 2, 3, 5, 8, 13, 21, ....

Every next number is found by adding up the two numbers before it.

Expected Output : 1 1 2 3 5 8 13 21 34

Hint: Fabonacci series - <https://www.mathsisfun.com/numbers/fibonacci-sequence.html>

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Q-5 (ii)

Write a program to reverse a string.

Example:- Input = RAMAN; Output = NAMAR

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Q-6

Write a Python program which iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".

Sample Output:

fizzbuzz

1

2

fizz

4

buzz

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### Q-7

Write a Python program to print alphabet pattern 'A'.

Expected Output:

```
  *  *

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

### Q-8

Write a Python program to print alphabet pattern 'P'.

Expected Output:

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

### Q-9

Write a Python program to create the multiplication table (from 1 to 10) of a number.

Expected Output:

Input a number: 6

6 x 1 = 6

6 x 2 = 12

6 x 3 = 18

6 x 4 = 24

6 x 5 = 30

6 x 6 = 36

6 x 7 = 42

**6 x 8 = 48**

**6 x 9 = 54**

**6 x 10 = 60**

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**Q-10**

**Write a Python program to construct the following pattern, using a nested loop number.**

**Expected Output:**

**1**

**22**

**333**

**4444**

**55555**

**666666**

**7777777**

**88888888**

**999999999**

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**Solution**

1- <https://www.w3resource.com/python-exercises/python-conditional-statements-and-loop-exercises.php>

2- <https://pynative.com/python-if-else-and-for-loop-exercise-with-solutions/>

3- <https://csiplearninghub.com/python-if-else-conditional-statement-practice/>

