### Exercise 1: Print the following pattern

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

### Exercise 2: Write a program to print multiplication table of a given number

For example, num = 2 so the output should be

2

4

6

8

10

12

14

16

18

20

### Exercise 3: Display numbers from a list using loop

Write a program to display only those numbers from a [list](https://pynative.com/python-lists/) that satisfy the following conditions

* The number must be divisible by five
* If the number is greater than 150, then skip it and move to the next number
* If the number is greater than 500, then stop the loop

**Given**:

numbers = [12, 75, 150, 180, 145, 525, 50]

**Expected output:**

75

150

145

### Exercise 4: Count the total number of digits in a number

Write a program to count the total number of digits in a number using a while loop.

For example, the number is **75869**, so the output should be **5**.

### Exercise 5: Print list in reverse order using a loop

**Given**:

list1 = [10, 20, 30, 40, 50]

**Expected output:**

50

40

30

20

10

### Exercise 6: Write a program to display all prime numbers within a range

**Note**: A Prime Number is a number that cannot be made by multiplying other whole numbers. A prime number is a natural number greater than 1 that is not a product of two smaller natural numbers

**Examples**:

* 6 is not a prime mumber because it can be made by 2×3 = 6
* 37 is a prime number because no other whole numbers multiply together to make it.

**Given**:

# range

start = 25

end = 50

**Expected output:**

Prime numbers between 25 and 50 are:

29

31

37

41

43

47

### Exercise 7: Use a loop to display elements from a given list present at odd index positions

**Given:**

my\_list = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]

**Note**: list index always starts at 0

**Expected output:**

20 40 60 80 100

### Exercise 8: Calculate the cube of all numbers from 1 to a given number

Write a program to rint the cube of all numbers from 1 to a given number

**Given**:

input\_number = 6

**Expected output:**

Current Number is : 1 and the cube is 1

Current Number is : 2 and the cube is 8

Current Number is : 3 and the cube is 27

Current Number is : 4 and the cube is 64

Current Number is : 5 and the cube is 125

Current Number is : 6 and the cube is 216

### Exercise 9: Print the following pattern

Write a program to print the following start pattern using the for loop

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