

write a script that prints the multiples of 7 between 0 and 100 python write a script that prints the multiples of 7 between 0 and 100 python

## Python Programs

**1).** Write a program which will find all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200 (both included). The numbers obtained should be printed in a comma-separated sequence on a single line.

**2).** Write a program which can compute the factorial of a given numbers. The results should be printed in a comma-separated sequence on a single line.

Suppose the following input is supplied to the program:

8

Then, the output should be:

40320

**3).** With a given integral number n, write a program to generate a dictionary that contains (i, i\*i) such that i is an integral number between 1 and n (both included). and then the program should print the dictionary.

Suppose the following input is supplied to the program:

8

Then, the output should be:

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}

**4).** Write a program which accepts a sequence of comma-separated numbers from the console and generate a list and a tuple which contains every number.

Suppose the following input is supplied to the program:

34,67,55,33,12,98

Then, the output should be:

['34', '67', '55', '33', '12', '98']

('34', '67', '55', '33', '12', '98')

**5).** Write a program that accepts sequence of lines as input and prints the lines after making all characters in the sentence capitalized.

Suppose the following input is supplied to the program:

Hello world

Practice makes perfect

Then, the output should be:

HELLO WORLD

PRACTICE MAKES PERFECT

**6).** Write a program that accepts a sentence and calculate the number of uppercase letters and lowercase letters.

Suppose the following input is supplied to the program:

Hello world!

Then, the output should be:

UPPER CASE 1

LOWER CASE 9

**7).** Write a program that computes the value of  $a+aa+aaa+aaaa$  with a given digit as the value of  $a$ .

Suppose the following input is supplied to the program:

9

Then, the output should be:

11106

**8).** Write a program that computes the net amount of a bank account based a transaction log from console input. The transaction log format is shown as following:

Suppose the following input is supplied to the program:

D 300

D 300

W 200

D 100

D means deposit while W means withdrawal.

Then, the output should be:

500

**9).** You are required to write a program to sort the (name, age, height) tuples by ascending order where name is string, age and height are numbers. The tuples are input by console.

The sort criteria is:

1: Sort based on name;

2: Then sort based on age;

3: Then sort by score.

The priority is that name > age > score.

If the following tuples are given as input to the program:

Tom,19,80

John,20,90

Jony,17,91

Jony,17,93

Json,21,85

Then, the output of the program should be:

[('John', '20', '90'), ('Jony', '17', '91'), ('Jony', '17', '93'), ('Json', '21', '85'), ('Tom', '19', '80')]

**10).** Write a program which are divisible by 7 and between a given range 0 and n.

**11).** Use a list comprehension to square each odd number in a list. The list is input by a sequence of comma-separated numbers.

Suppose the following input is supplied to the program:

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

Then, the output should be:

1,3,5,7,9

**12).** Please write a program to output a random even **number** between 0 and 10 inclusive using random module and list comprehension.

**13).** Please write a program to output a random number, which is divisible by 5 and 7, between 0 and 10 inclusive using random module and list comprehension.

**14).** Please write a program to generate a list with 5 random numbers between 100 and 200 inclusive.

**15).** Please write a program to randomly generate a list with 5 even numbers between 100 and 200 inclusive.

**16).** Please write a program to randomly generate a list with 5 numbers, which are divisible by 5 and 7 , between 1 and 1000 inclusive.

**17).** Please write a program to shuffle and print the list [3,6,7,8].

**18).** Please write a program to generate all sentences where the subject is in ["I", "You"] and verb is in ["Play", "Love"] and the object is in

**19).** Please write a program to print the list after removing delete even numbers in [5,6,77,45,22,12,24].

**20).** By using list comprehension, please write a program to print the list after removing delete numbers which are divisible by 5 and 7 in [12,24,35,70,88,120,155].

**21).** By using list comprehension, please write a program generate a 3\*5\*8 3D array whose each element is 0.

**22).** By using list comprehension, please write a program to print the list after removing the 0th,4th,5th numbers in [12,24,35,70,88,120,155].

**23).** By using list comprehension, please write a program to print the list after removing the value 24 in [12,24,35,24,88,120,155],

**24).** With two given lists [1,3,6,78,35,55] and [12,24,35,24,88,120,155], write a program to make a list whose elements are intersection of the above given lists.

**25).** With a given list [12,24,35,24,88,120,155,88,120,155], write a program to print this list after removing all duplicate values with original order reserved.

**26).** Use a list comprehension to square each odd number in a list. The list is input by a sequence of comma-separated numbers.

Suppose the following input is supplied to the program:

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

Then, the output should be:

1,3,5,7,9

**27).** By using list comprehension, please write a program to print the list after removing the 0th, 2nd, 4th, 6th numbers in [12,24,35,70,88,120,155].

**28).** By using list comprehension, please write a program to print the list after removing the 0th, 4th, 5th numbers in [12,24,35,70,88,120,155]

**29).** Please write a program which accepts a string from the console and prints it in reverse order.

If the following string is given as input to the program:

rise to vote sir

Then, the output of the program should be:

ris etov ot esir

**30).** Write a program to generate below Pattern:

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

**31).** Write a program to print the below pattern

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

**32).** Write a program to generate below Pattern:

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

**33).** Write a program to generate below Pattern:

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