1 - Write a Python program to find the digits which are absent in a given mobile number.

Sample input : - [9,8,3,2,2,0,9,7,6,3]

Sample output:- [1,4,5]

2- Write a Python program to get the third side of right angled triangle from two given sides.

```
pythagoras(base,perpendicular,hypotenuse)
```

Input:-

pythagoras(3,4,'x')

pythagoras(3,'x',5)

pythagoras('x',4,5)

pythagoras(3,4,5)

pythagoras(1,1,6)

output:-

Hypotenuse = 5.0

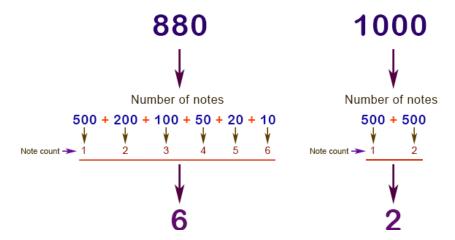
perpendicular = 4.0

base = 3.0

You know the answer

Triangle not possible

3 - Write a Python program to find the number of notes (Sample of notes: 10, 20, 50, 100, 200 and 500) against a given amount.



Input : -880

1000

Output:-

6

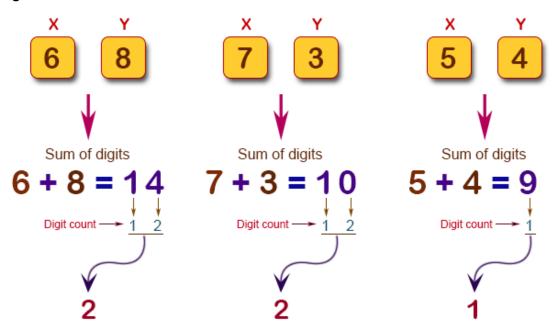
2

4 - Write a python program to find heights of the top three building in descending order from eight given buildings.

Input the heights of eight buildings:

```
25
35
37
15
16
30
45
39
Heights of the top three buildings:
45
39
37
```

Write a Python program to compute the digit number of sum of two given integers.



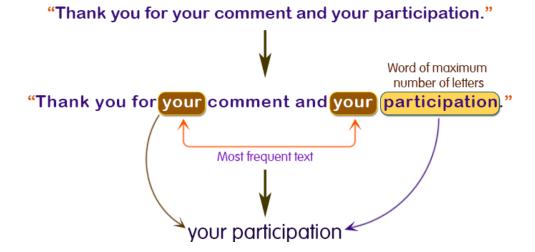
6 - Write a Python program to print all prime numbers which are less than or equal to a given integer.

## Input:

<u> </u>				
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35

7- Write a Python program to test whether two lines PQ and RS are parallel. The four points are P(x1, y1), Q(x2, y2), R(x3, y3), S(x4, y4).

8- Write a Python program which reads a text (only alphabetical characters and spaces.) and prints two words. The first one is the word which is arise most frequently in the text. The second one is the word which has the maximum number of letters.



9 - Write a Python program to compute the sum of first n given prime numbers. (similar to question 6)

Input:- 25

Output :- 1060

10 - Write a Python program that accept two strings and test if the letters in the second string are present in the first string.

```
"python", "ypth"
python", "ypths"
python", "ypthon"
"123456", "01234"
"123456", "1234"
True
False
True
False
True
False
True
```

**11.** Write a Python program to count the number of characters (character frequency) in a string.

```
Sample String : google.com'

Expected Result : {'o': 3, 'g': 2, '.': 1, 'e': 1, 'l': 1, 'm': 1, 'c': 1}
```

**12.** Write a Python program to get a string made of the first 2 and the last 2 chars from a given a string. If the string length is less than 2, return instead of the empty string.

Sample String: 'w3resource'

Expected Result : 'w3ce'

Sample String: 'w3'

Expected Result : 'w3w3'

Sample String: 'w'

Expected Result : Empty String

13 - Write a Python program to add 'ing' at the end of a given string (length should be at least 3). If the given string already ends with 'ing' then add 'ly' instead. If the string length of the given string is less than 3, leave it unchanged.

Sample String: 'abc' Expected Result: 'abcing' Sample String: 'string' Expected Result: 'stringly' **14.** Write a Python program to swap comma and dot in a string.

Sample string: "32.054,23" Expected Output: "32,054.23"

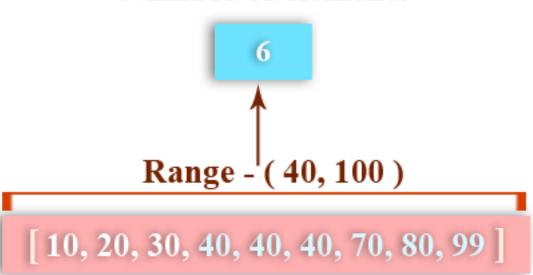
- 15- Write a Python program to generate a 3\*4\*6 3D array whose each element is random.
- 16 -. Write a Python program to count the number of strings where the string length is 2 or more and the first and last character are same from a given list of strings.

Sample List : ['abc', 'xyz', 'aba', '1221']

Expected Result : 2

17 - Write a Python program to count the number of elements in a list within a specified range.

## Number of elements



18. Write a Python program to remove consecutive duplicates of a given list. Original list:

[0, 0, 1, 2, 3, 4, 4, 5, 6, 6, 6, 7, 8, 9, 4, 4]

After removing consecutive duplicates:

[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 4]

19- Write a Python function to calculate the factorial of a number (a non-negative integer). The function accepts the number as an argument.

20- Write a Python program to convert an integer to a roman numeral. 21-