Write a program that counts the number of vowels and consonants in a string.

#### Task 2

Write a Program to check if a given string is a palindrome (reads the same forwards and backwards).

#### Task 3

Write a program to remove duplicate values in the given string

#### Task 4

Find the Sum and Average Write a Python program that takes a list of numbers as input and calculates and prints the sum and average of those numbers.

#### Task 5 |

Reverse a List Write a Python function that takes a list and returns a new list with the elements reversed. Do this without using the built-in reverse method.

#### Task 6

Remove Duplicates from a List Create a Python function that takes a list as input and removes duplicate elements, preserving the order of the elements. Return the new list.

#### Task 7

Find Common Elements Create a Python program that takes two lists and returns a new list containing elements that are common in both input lists.

#### Task 8

Count the Occurrences of an Element Write a Python function that takes a list and an element as input and counts how many times that element appears in the list

# Task 9

Count the Occurrences of an Element Write a Python function that takes a tuple and an element as input and counts how many times that element appears in the tuple.

# Task 10

Calculate Average Age Write a Python program that takes a list of person tuples (name, age) and calculates and prints the average age of the group

#### Task 11

Find Common Elements Create a Python program that takes two sets and returns a new set containing elements that are common in both input sets.

#### Task 12

Unique Characters Create a Python program that takes a string as input and checks if all the characters in the string are unique (i.e., no character repeats). Return True if all characters are unique, and False otherwise

# Task 13

Write a Python function that takes a dictionary of items and their prices as input and finds and prints the keys (items) with the highest prices. Find Keys with Maximum Value

Convert two lists into a dictionary in Python without using a built-in method

# Task 15

Write a program to check Armstrong number.

# Task 16

Write a program to check palindrome number.

# Task 17

Write a program to print sum of digits.

# Task 18

Print the Fibonacci series for first 12 numbers

# Task 19

Print the patterns



# Task 20

Write a Program to print the multiplication table.

#### Task 21

How to find the factorial of number 5.

# Task 22

Write a Program to Check Whether a Number is Prime or Not.

# Task 23

Print the given pattern

13579

3579

579

79

9

Write a Python program that uses list comprehension to create a new list containing the squares of the numbers from 1 to 10.

#### Task 25

Write a Python program that uses a "for" loop to iterate over a string and prints out each character along with its count.

# Task 26

Write a Python program that uses a list comprehension to create a new list that contains only the uppercase letters in an existing list of strings.

#### Task 27

To write a program in python find the second smallest and third largest number in a list.

#### Task 28

Write a Python program to remove duplicates from a list while preserving the order of elements

#### Task 29

Create a simple calculator operations using function.

#### Task 30

Create a Python function that takes a string as input and counts the number of vowels and consonants in the string

# Task 31

Write a short program that prints each number from 1 to 100 on a new line.

For each multiple of 3, print "Fizz" instead of the number.

For each multiple of 5, print "Buzz" instead of the number.

For numbers which are multiples of both 3 and 5, print "FizzBuzz" instead of the number.

# Task 32

Reverse a number including negative numbers also

# Task 33

Count the number of duplicate elements in a list

# Task 34

Write a program to reverse a string

# Task 35

Write a program to swap values of two variables without using third variable and also swap the values of three variables without using fourth variable

# Task 36

Write a program to convert a string to lowercase, uppercase, titlecase, swap lower into upper and upper into lower

Write a program to print leap years between a range

#### Task 38

Write a program to create an iterator to print English alphabets from A to Z.

#### Task 39

Write a program to create a custom iterator that iterates from 1 to 10 in 0.5 intervals

#### Task 40

Write a Python program to sort a list of tuples using Lambda. Original list of tuples: [('English', 88), ('Science', 90), ('Maths', 97), ('Social sciences', 82)]

#### Task 41

Write a Python program to sort a list of dictionaries using Lambda. Original list of dictionaries: [{'make': 'Nokia', 'model': 216, 'color': 'Black'}, {'make': 'Mi Max', 'model': 2', 'color': 'Gold'}, {'make': 'Samsung', 'model': 7, 'color': 'Blue'}]

# Task 42

Write a Python program to square and cube every number in a given list of integers using Lambda. Original list of integers: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

# Task 43

Write a Python program to create Fibonacci series up to n using Lambda.

# Task 44

Write a Python program to find numbers divisible by nineteen or thirteen from a list of numbers using Lambda.

#### Task 45

Write a Python program to calculate the sum of the positive and negative numbers of a given list of numbers using the lambda function

#### Task 46

Write a function in python to count the number of lines from a text file "story.txt" which is not starting with an alphabet "T".

#### Task 47

Write a function in Python to count words in a text file those are ending with alphabet "e".

# Task 48

Write a function in Python to count and display the total number of words in a text file

### Part 1

Write a Python program to check that a string contains only a certain set of characters (in this case a-z, A-Z and 0-9).

#### Part 2

Write a Python program that matches a string that has an a followed by zero or one 'b

# Task 50

Write a program for sorting

#### Task 51

Find the first non repeated character in a word

# Task 52

Write a program for pascal's triangle

#### Task 53

Find out common letters between two strings

#### Task 54

Convert list to dictionary and dictionary to tuple

### Task 55

Write a program to remove duplicates from the list

#### Task 56

Write a program to display duplicates from the list

#### Task 57

Write a program to from range 1-100 and print the even numbers and if the even number is multiple of 10,then break the program

#### Task 58

Find largest element in the list, smallest element in the list and also find third largest and second smallest element from the list

#### Task 59

Write a code snippet to convert a string to a list.

### Task 60

How do you print the summation of all the numbers from 1 to 101?

#### Task 61

construct a Python program that calculates the mean of numbers in a list?

Write a Python script to implement the Bubble sort algorithm.

#### Task 63

Write a Python program to determine whether a number is binary.

# Task 64

Write a Python code to reverse a given list.

# Task 65

How can you replace string space with a given character in Python?

# Task 66

Given a positive integer num, write a function that returns True if num is a perfect square else False.

#### Task 67

Find the missing number in the array

#### Task 68

Write a Python program to count the frequency of each element in a list.

# Task 69

Find the middle element in the list

# Task 70

Adding two list elements together

# Task 71

Counting the white space in a string

# Task 72

Remove all white spaces in the string

# Task 73

Check the given number is odd or even

# Task 74

Check the given number is negative or positive

#### Task 75

Maximum of two numbers

### Task 76

Minimum of two numbers

# Task 77

Maximum of three numbers

# Write a program to print the following pattern.

Here is the Program to print the following pattern:



# Task 80

# Write a program to print the following pattern.

Below is the Program to print the following pattern:

# Task 81

# Write a program to print the following pattern.

Below is the Program to print the following pattern:

```
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```

# Write a program to print the following pattern.

Here is the Program to print the following pattern:



# Task 83

# Write a program to print the following pattern.

Program to print the following pattern is given below:



# Task 84

Calculate the sum of all numbers from 1 to a given number

# Task 85

Calculate the area of a circle with a given radius.

#### Task 86

Check if a list is empty.

#### Task 87

Calculate the power of a number.

# Task 88

: Find the length of the longest word in a given sentence.

# Task 89

Capitalize the first letter of each word in a sentence.

# Task 90

write a program to find the sum of positive and negative numbers from the list of numbers

Given an integer n, perform the following conditional actions

If n is odd, print weird

If n is even and in the inclusive range of 2 to 5, print not weird

If n is even and in the inclusive range of 6 to 20, print weird

If n is even and greater than 20, print not weird

# Task 92

Given a year, determine whether it is a leap year. If it is a leap year, return the boolean True. Otherwise return false

# Task 93

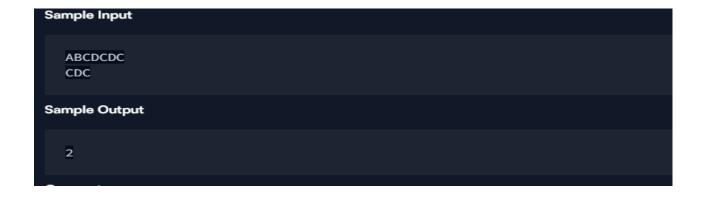
Find the second largest element in the list

Eg: list = [2,3,6,6,5]

output = 5

# Task 94

Find the number of occurrences of a substring in a given string.



In the first line, print True if S has any alphanumeric characters. Otherwise, print False.

In the second line, print True if S has any alphabetical characters. Otherwise, print False.

In the third line, print True if S has any digits. Otherwise, print False.

In the fourth line, print True if S has any lowercase characters. Otherwise, print False.

In the fifth line, print True if S has any uppercase characters. Otherwise, print False.

Sample Input

QA2

Sample Output

True

#### Task 96

Print the squares of all non-negative integers less than a given number.

Eg : input = 5 , output = 0,1,4,9,16

# Task 97

Python program to interchange first and last elements in a list Input = [12, 35, 9, 56, 24] output = [24,35,9,56, 12]

# Task 98

Python program to swap two elements in a list based on positions

Input: List = [23, 65, 19, 90], pos1 = 1, pos2 = 3

Output: [19, 65, 23, 90]

Input: List = [1, 2, 3, 4, 5], pos1 = 2, pos2 = 5

Output: [1, 5, 3, 4, 2]