**Interview Questions:**

**Python :**

1. Write a Python program to calculate the factorial of a number.

Solution- def Fact(a):

fact =1

for i in range(1,a+1):

fact =fact\*i

a-=1

return fact

Numb=int(input("Enter A Number"))

Fact(Numb)

1. Implement a program to check if a given number is prime or not.

Solution- def is\_prime(num):

if num <= 1:

return False # Numbers less than or equal to 1 are not prime

# Check for factors from 2 to the square root of the number

for i in range(2, int(num\*\*0.5) + 1):

if num % i == 0:

return False # If a factor is found, the number is not prime

return True # If no factors are found, the number is prime

# Taking input from the user

number = int(input("Enter a number: "))

# Checking if the number is prime

if is\_prime(number):

print(number, "is a prime number.")

else:

print(number, "is not a prime number.")

1. Create a Python program to find the sum of all elements in a list.

Solution- a=[1,2,3,4,5]

sum=0

for i in a:

sum=sum +i

print(sum)

1. Write a program to reverse a given string.

Solution- def reverse\_string(input\_string):

return input\_string[::-1]

# Example string

original\_string = input("Enter a string: ")

# Reversing the string

reversed\_string = reverse\_string(original\_string)

print("Reversed string:", reversed\_string)

1. Implement a function to check if two strings are anagrams or not.

Solution- def are\_anagrams(str1, str2):

# Remove spaces and convert strings to lowercase

str1 = str1.replace(" ", "").lower()

str2 = str2.replace(" ", "").lower()

# Check if the sorted characters of both strings are the same

return sorted(str1) == sorted(str2)

# Example strings

string1 = input("Enter the first string: ")

string2 = input("Enter the second string: ")

# Check if the strings are anagrams

if are\_anagrams(string1, string2):

print("The strings are anagrams.")

else:

print("The strings are not anagrams.")