

LAB 3

Q1. WAP to demonstrate while loop with else statement.

In [4]:

```
x = 0
s = 0
while (x < 10):
    s = s + x
    x = x + 1
else :
    print('The sum of first 9 integers : ',s)
```

The sum of first 9 integers : 45

Q2. Print 1st 5 even numbers (use break statement)

In [8]:

```
count = 0
for i in range(1,11):
    if i%2==0:
        print(i)
        count=count+1
    if count==5:
        break
```

2
4
6
8
10

Q3. Print 1st 4 even numbers (use continue statement).

In [9]:

```
for i in range(1,10):
    if i%2==0:
        print(i)
    else:
        continue
```

2
4
6
8

Q4. WAP to demonstrate Pass statements.

In [10]:

```
def a():  
    pass  
def b():  
    print("Hello")  
a()  
b()
```

Hello

Q5. Write a Python program to calculate the length of a string.

In [19]:

```
st="Hello world"  
print(len(st))
```

11

Q6. Write a Python program to count the number of characters (character frequency) in a string

In [17]:

```
def char_frequency(str1):  
    dict = {}  
    for n in str1:  
        keys = dict.keys()  
        if n in keys:  
            dict[n] += 1  
        else:  
            dict[n] = 1  
    return dict  
print(char_frequency('Corona Virus'))
```

```
{'C': 1, 'o': 2, 'r': 2, 'n': 1, 'a': 1, ' ': 1, 'V': 1, 'i': 1,  
'u': 1, 's': 1}
```

Q7. 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.

In [20]:

```
str="vivek"
length=len(str)
if length<2:
    print("enter a long string")
else:
    a=str[0:2]
    b=str[-2:]
    str1 = a+b
    print(str1)
```

viek

Q8. Write a Python program to get a string from a given string where all occurrences of its first char have been changed to '\$', except the first char itself

In [25]:

```
def change_char(str1):
    char = str1[0]
    str1 = str1.replace(char, '$')
    str1 = char + str1[1:]

    return str1

print(change_char('restart'))
```

resta\$t

Q9. Write a Python program to get a single string from two given strings, separated by a space and swap the first two characters of each string.

In [12]:

```
str1="Vivek"
str2="Saini"
a=str2[0]+str1[1:]
b=str1[0]+str2[1:]
str=a+" "+b
print(str)
```

Sivek Vaini

Q10. 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.

In [24]:

```
str="Loveing"  
if len(str)>3:  
    if str[-3:]=="ing":  
        str1=str+"ly"  
        print(str1)  
    else:  
        str1=str+"ing"  
        print(str1)  
else:  
    print(str)
```

Loveingly

In []: