

PYTHON-WORKSHEET1

In [1]:

```
#Q11) Program to find the factorial of a number.

n=int(input("Enter a number,n= "))

factorial=1

if(n<0):
    print("Factorial for negative number is not possible.")

elif n==0:
    print("Factorial of 0 is 1.")

else:
    for i in range(1,n+1):
        factorial=factorial*i
    print("The factorial of",n,"is",factorial)
```

Enter a number,n= 6
The factorial of 6 is 720

In [2]:

```
#Q12) Program to find whether a number is prime or composite.

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

if num>1:
    for i in range(2,num):
        if num % i== 0:
            print(num,"is not a prime number. It is a composite number.")
            break

    else:
        print(num,"is a Prime number.")

elif num==0 or num==1:
    print(num,"is neither prime nor composite.")
```

Enter a number: 13
13 is a Prime number.

In [3]:

```
#Q13) Program to check whether a givrn string is palindrome or not.

str="level"
str

if(str==str[::-1]):
    print("The string is a Palindrome.")
else:
    print("The string is not a Palindrome.")
```

The string is a Palindrome.

In [4]:

```
#Q14) Program to find the third side of right-angled triangle from two given sides.
# c=sqrt(a**2+b**2)

import math

a=int(input("Enter the opposite side of a right-angled triangle:"))

b=int(input("Enter the adjacent side of a right-angled triangle"))

c=math.sqrt(a**2+b**2)

print("The hypotenuse of a right-angled triangle is:",c)
```

Enter the opposite side of a right-angled triangle:3
Enter the adjacent side of a right-angled triangle4
The hypotenuse of a right-angled triangle is: 5.0

In [5]:

```
#Q15) Program to print the frequency of each of the characters present in a given string.

string=input("Enter the string:")

freq={}

for i in string:
    if i in freq:
        freq[i]=freq[i]+1
    else:
        freq[i]=1

print("The frequencies of each characters present in the given string are:",freq)
```

Enter the string:application
The frequencies of each characters present in the given string are: {'a': 2, 'p': 2, 'l': 1, 'i': 2, 'c': 1, 't': 1, 'o': 1, 'n': 1}