PYTHON – WORKSHEET 1

1. Which of the following operators is used to calculate remainder in a division?

Answer→ C) %

2. In python 2//3 is equal to?

Answer→ B) 0

3. In python, 6<<2 is equal to?

Answer→ C) 24

4. In python, 6&2 will give which of the following as output?

Answer→ A) 2

5. In python, 6|2 will give which of the following as output?

Answer→ D) 6

6. What does the finally keyword denotes in python?

Answer→

C) the finally block will be executed no matter if the try block raises an error or not.

7. What does raise keyword is used for in python?

Answer→ A) It is used to raise an exception.

8. Which of the following is a common use case of yield keyword in python?

Answer→ C) in defining a generator.

9. Which of the following are the valid variable names?

A) _abc C) abc2

10. Which of the following are the keywords in python?

A) yield B) raise

11. Write a python program to find the factorial of a number.

Answer→

In [54]:

```
num=int(input("Enter a number:"))
factorail=1

if num<0:
    print("Factorial does not exist for negative numbers:")

elif num==0:
    print("The factorail of 0 is 1")

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

```
Enter a number:5
The factorial of 5 is 120
```

12. Write a python program to find whether a number is prime or composite.

Answer→

In [52]:

```
Input=int(input("Enter a number to check:"))
count=0

for number in range(1,Input+1):
    remainder=Input%number
    if(remainder==0):
        count=count+1

if (count==1):
    print("The number is neither prime nor composite number.")

if (count==2):
    print("The number is a prime number.")

elif(count>3):
    print("The number is a composite number.")
```

```
Enter a number to check:11
The number is a prime number.
```

13. Write a python program to check whether a given string is palindrome or not. .

Answer→

```
In [39]:
number=int(input("Enter any number:"))
temp=number
reverse_num=0
while(number>0):
    digit=number%10
    reverse_num=reverse_num*10+digit
    number=number//10
    if(temp==reverse_num):
        print("The number is palindrome!")
    else:
        print("Not a palindrome!")
```

```
Enter any number:5
The number is palindrome!
```

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

Answer→

```
In [38]:
print("Input lenghts of shorter triangle side:")
a=float(input("a: "))
b=float(input("b: "))
c=sqrt(a**2+b**2)
print("The lenght of the hypotenuse is:",c)
```

```
Input lenghts of shorter triangle side:
a: 10
b: 5
The lenght of the hypotenuse is: 11.180339887498949
```

15. Write a python program to print the frequency of each of the characters present in a given string.

Answer→

```
In [56]:
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('hello world'))
```

```
{'h': 1, 'e': 1, 'l': 3, 'o': 2, ' ': 1, 'w': 1, 'r': 1, 'd': 1}
```