Python worksheet 1 Answersheet

In [8]:

```
#Answer1 : C) %
```

In [10]:

```
#Answer2 : B) 0
```

In [11]:

```
2//3
```

Out[11]:

```
0
```

In [13]:

```
#Answer3 : C) 24
```

In [12]:

```
6<<2
```

Out[12]:

```
24
```

In [15]:

```
#Answer4 : A) 2
```

In [16]:

```
6&2
```

Out[16]:

```
2
```

In [18]:

```
#Answer5 : D) 6
```

In [17]:

```
6|2
```

Out[17]:

```
6
```

In [19]:

```
#Answer6 : D) None of the above
```

In [24]:

```
#Answer7 : A) It is used to raise an exception.
```

In [25]:

```
#Answer8 : C) in defining a generator
```

In [31]:

```
#Answer9 : A) _abc & C) abc2
```

In [38]:

```
#Answer10 : A) yield & B) raise
```

In [39]:

```
#Answer11 : Write a python program to find the factorial of a number
```

In [40]:

```
num = 7
```

In [41]:

```
factorial = 1
```

In [42]:

```
if num < 0:
   print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
   print("The factorial of 0 is 1")
else:
   for i in range(1,num + 1):
       factorial = factorial*i
   print("The factorial of",num,"is",factorial)
```

```
The factorial of 7 is 5040
```

In [ ]:

```

```

In [44]:

```
#Answer12 : Write a python program to find whether a number is prime or composite.
```

In [46]:

```
number = int(input("Enter The Number"))
```

```
Enter The Number15
```

In [47]:

```
if number > 1:
    for i in range(2,int(number/2)+1):
        if (number % i == 0):
            print(number, "is not a Prime Number")
            break
    else:
        print(number,"is a Prime number")
```

```
15 is not a Prime Number
```

In [ ]:

```

```

In [48]:

```
#Answer13 : Write a python program to check whether a given string is palindrome or not.
```

In [49]:

```
my_str = 'aIbohPhoBiA'
```

In [51]:

```
my_str = my_str.casefold()
```

In [52]:

```
rev_str = reversed(my_str)
```

In [53]:

```
if list(my_str) == list(rev_str):
   print("The string is a palindrome.")
else:
   print("The string is not a palindrome.")
```

```
The string is a palindrome.
```

In [ ]:

```

```

In [54]:

```
#Answer14 : Write a Python program to get the third side of right-angled triangle from tw
o given sides.
```

In [55]:

```
def pythagoras(opposite_side,adjacent_side,hypotenuse):
        if opposite_side == str("x"):
            return ("Opposite = " + str(((hypotenuse**2) - (adjacent_side**2))**0.5))
        elif adjacent_side == str("x"):
            return ("Adjacent = " + str(((hypotenuse**2) - (opposite_side**2))**0.5))
        elif hypotenuse == str("x"):
            return ("Hypotenuse = " + str(((opposite_side**2) + (adjacent_side**2))**0.5
))
        else:
            return "You know the answer!"
```

In [56]:

```
print(pythagoras(3,4,'x'))
print(pythagoras(3,'x',5))
print(pythagoras('x',4,5))
print(pythagoras(3,4,5))
```

```
Hypotenuse = 5.0
Adjacent = 4.0
Opposite = 3.0
You know the answer!
```

In [ ]:

```

```

In [57]:

```
#Answer15 : Write a python program to print the frequency of each of the characters prese
nt in a given string
```

In [58]:

```
from collections import Counter
```

In [66]:

```
strA = "timeofeffort"
print("Given String: ",strA)

res = {}
```

```
for keys in strA:
    res[keys] = res.get(keys, 0) + 1

print("Frequency of each character :\n ",res)
```

```
Given String:  timeofeffort
Frequency of each character :
  {'t': 2, 'i': 1, 'm': 1, 'e': 2, 'o': 2, 'f': 3, 'r': 1}
```

In [ ]:

```

```