PYTHON – WORKSHEET 1

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Batch No: - 1836

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

Ans: - C - (%)

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

Ans: - B -(0)

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

Ans:- C – (24)

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

Ans:- A – (2)

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

Ans:- D – (6)

6.) What does the finally keyword denotes in python?

Ans:- B – (It encloses the lines of code which will be executed if any error occurs while executing the lines of code in the try block.)

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

Ans:- A – (It is used to raise an exception.)

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

Ans:- C – (in defining a generator)

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

Ans:- B – (abc2)

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

Ans:- A and B (Yield, Raise)

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

Sol.:-

```
def  factorial(n):
   return 1 if (n==1 or n==0) else n * factorial(n - 1);
num = 5;
print("Factorial of",num,"is",
factorial(num))
```

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

Sol.:-

```
number = int(input("Enter The Number"))
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")
# If the number is less than 1 it can't be Prime
```

```
else:
    print (number,"is not a Prime number")
```

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

Sol.:-

```
def reverse(s):
return s[::-1]
x=input("enter the string")
print("reversed string is  ", reverse(x))
```

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

Sol.:-

```
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!"
print(pythagoras(8,9,'x'))
print(pythagoras(8,'x',10))
```

```
print(pythagoras('x',9,10))

print(pythagoras(8,9,10))
```

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

Sol.:-

```
def counter(word,character,number=0):
    print("word=",word)
    print("character to count=",character)
  print("recurssion =",end="")
   for i in word:
      if(i==character):
         number=number+1
   print(number)
word=input("enter the string")
character=input("enter the character to be scanned")
counter(word,character)
```

2nd Method:-

```
test_str = "AllisWell"
 res = {}

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

# printing result
print ("Count of all characters in AllisWell is : \n" +  str(res))
```