PYTHON – WORKSHEET 1

(13-09-2021 to 20-09-2021)

Solutions

1. Which of the following operators is used to calculate remainder in a division?
A) # B) &
C) % D) $

Ans. C (%)

2. In python 2//3 is equal to?
A) 0.666 B) 0
C) 1 D) 0.67

Ans. B (0)

3. In python, 6<<2 is equal to?
A) 36 B) 10
C) 24 D) 45

Ans. C (24)

4. In python, 6&2 will give which of the following as output?
A) 2 B) True
C) False D) 0

Ans. A (2)

5. In python, 6|2 will give which of the following as output?
A) 2 B) 4
C) 0 D) 6

Ans. D (6)

6. What does the finally keyword denotes in python?
A) It is used to mark the end of the code
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.
C) The finally block will be executed no matter if the try block raises an error or not.
D) None of the above

Ans. C

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Solutions

7. What does raise keyword is used for in python?
A) It is used to raise an exception. **B) It is used to define lambda function**
C) it's not a keyword in python. **D) None of the above**

Ans. A

8. Which of the following is a common use case of yield keyword in python?
A) In defining an iterator **B) while defining a lambda function**
C) in defining a generator **D) in for loop.**

Ans. C

9. Which of the following are the valid variable names?
A) _abc **B) 1abc**
C) abc2 **D) None of the above**

Ans. A, B, C

10. Which of the following are the keywords in python?
A) yield **B) raise**
C) look-in **D) all of the above**

Ans. A, B

Q11 to Q15 are programming questions. Answered in Jupyter Notebook.

11. Write a python program to find the factorial of a number.
12. Write a python program to find whether a number is prime or composite.
13. Write a python program to check whether a given string is palindrome or not.
14. Write a Python program to get the third side of right-angled triangle from two given sides.
15. Write a python program to print the frequency of each of the characters present in a given string.

Flip Robo Technologies - Python Worksheet 1

Programming Questions:

1. Write a python program to find the factorial of a number.
2. Write a python program to find whether a number is prime or composite.
3. Write a python program to check whether a given string is palindrome or not.
4. Write a Python program to get the third side of right-angled triangle from two given sides.
5. Write a python program to print the frequency of each of the characters present in a given string

In [ ]:

```
#11.Factorial of a number

#Taking input from user to which number factorial is to be found
number = int(input('Enter the number to find it\'s factorial:'))

#Check for the number
if number < 0:
    print('The number is negative, no factorial')
elif number == 0:
    print(f'factorial of given number {number} is: 1')
else:
    factorial=1
    for i in range(1,number+1):
        factorial*=i
    print(f'Factorial of given number {number} is:',factorial)
```

In [47]:

```
#12. Number is prime or composite
number = int(input('Enter the number to check:'))

#Check the number
if number == 0 or number == 1:
    print(f'the given number {number} is: Neither Prime nor Composite')
elif number<0:
    print(f'the given number {number} is negative, can\'t be prime or composite' )
elif number>1:
    for i in range(2,int(number/2)):
        if (number%i) == 0:
            print(f'the given number {number} is: Composite')
            break
        else:
            print(f'the given number {number} is: Prime')
            break
```

```
Enter the number to check:15
the given number 15 is: Prime
```

In [73]:

```
#13. Given string is Palindrome or not

#Taking input from the user
string=input('Enter the word: ')

#Reading the string in reverse and assigned to new variable
r_string=string[::-1]

#Comparing both strings
if r_string == string:
    print(f'Given string is: {string} \nit\'s reverse is: {r_string}')
    print('Palindrome')
else:
    print(f'Given string is: {string} \nit\'s reverse is: {r_string}')
    print('Not a palindrome')
```

```
Enter the word: 121
Given string is: 121
it's reverse is: 121
Palindrome
```

In [83]:

```
#Finding third side of triangle
import math

missing = input('Enter the side to be found (hypotenuse or side) : ')
if missing.lower() == 'hypotenuse':
    a=float(input('Enter the value of side a: '))
    b=float(input('Enter the value of side b: '))
    hypotenuse=math.sqrt(a**2+b**2)
    print('The missing side value is: ',round(hypotenuse,2))
else:
    hyp=float(input('Enter the hypotenuse value: '))
    a=float(input('Enter the known side value: '))
    b=math.sqrt(hyp**2-a**2)
    print('The missing side value is: ',round(b,2))
```

```
Enter the side to be found (hypotenuse or side) : side
Enter the hypotenuse value: 2.86
Enter the known side value: 2
The missing side value is:  2.04
```

In [7]:

```
#Frequancy of every letter in string
string=input('Enter the word: ')

num={i:string.count(i) for i in set(string)}
print(f'The frequancy of letters in the given word {string} are:\n',num)
```

```
Enter the word: Flip-Robo-Technologies
The frequancy of letters in the given word Flip-Robo-Technologies are:
 {'l': 2, 'o': 4, 'F': 1, 'h': 1, 'i': 2, 'b': 1, 'c': 1, '-': 2, 'p': 1,
'e': 2, 'n': 1, 'R': 1, 'T': 1, 's': 1, 'g': 1}
```