

Python MCQ Answers

- 1.(C)
- 2.(B)
- 3.(C)
- 4.(A)
- 5.(D)
- 6.(C)
- 7.(A)
- 8.(C)
- 9.(A), (C)
- 10.(A), (B)

```
In [1]: def factorial(n):
        if (n==1 or n==0):
            return 1
        else:
            return (n * factorial(n - 1))

num = int(input('Enter the number'))
print("number : ",num)
print("Factorial : ",factorial(num))

Enter the number5
number : 5
Factorial : 120
```

```
In [108]: ## prime or composite

def prime_comp(number):
    if number < 1:
        return('number needs to be greater than 1')
    elif number == 1:
        return('number is neither prime nor composite')
    else:
        for num in range(2,(number//2) +1):
            if (number % num) == 0:
                return(f'{number} is a composite number')
            else:
                return(f'{number} is a prime number')

print(prime_comp(15))
print(prime_comp(19))
print(prime_comp(12))
print(prime_comp(3))

15 is a composite number
19 is a prime number
12 is a composite number
3 is a prime number
```

```
In [23]: ### program to find if string is palindrome

def palindrome(str1):
    if str1 == str1[::-1]:
        return(f'{str1} is Palindrome')
    else:
        return(f'{str1} is not Palindrome')

print(palindrome('Ashish'))
print(palindrome('malayalam'))

Ashish is not Palindrome
malayalam is Palindrome
```

```
In [84]: ### third side of right angle triangle
import numpy as np

def side_calc1(**kwargs):
    if kwargs.get('hypotenuse',0) != 0 and kwargs.get('perpendicular',0) != 0:
        base = np.sqrt( kwargs.get('hypotenuse')**2 - kwargs.get('perpendicular')**2)
        return(f'base value={round(base,1)}')
    elif kwargs.get('hypotenuse',0) != 0 and kwargs.get('base',0) != 0:
        perpendicular = np.sqrt( kwargs.get('hypotenuse')**2 - kwargs.get('base')**2)
        return(f'perpendicular value={round(perpendicular,1)}')
    elif kwargs.get('perpendicular',0) != 0 and kwargs.get('base',0) != 0:
        hypotenuse = np.sqrt( kwargs.get('base')**2 + kwargs.get('perpendicular')**2)
        return(f'hypotenuse value={round(hypotenuse,1)}')
    else:
        return('Invalid Input')

print(side_calc1(perpendicular=5,base=6))
print(side_calc1(hypotenuse=8,base=6))
print(side_calc1(hypotenuse=10,perpendicular=6))
print(side_calc1())

hypotenuse value=7.8
perpendicular value=5.3
base value=8.0
Invalid Input
```

```
In [88]: # Write a python program to print the frequency of each of the characters present in a given
string.
from collections import Counter

def count_func(str1):
    count_dict = Counter(str1)
    for key,val in count_dict.items():
        print(f'{key} occured {val} times')

count_func('Ashish')

A occured 1 times
s occured 2 times
h occured 2 times
i occured 1 times
```