

1. C) %
2. B) 0
3. C) 24
4. A) 2
5. D) 6
6. C) the finally block will be executed no matter if the try block raises an error or not.
7. A) It is used to raise an exception
8. C) in defining a generator
9. A) \_abc, C) abc2
10. A) yield, B) raise

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

```
def factorial(n):  
    return 1 if (n==1 or n==0) else n * factorial(n - 1)  
  
num = int(input("Enter the Number"))  
  
print("Factorial of",num,"is",factorial(num))
```

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

```
num = int(input('Enter number'))  
  
if num > 1:  
    for i in range(2, (num//2)+1):  
        if (num % i) == 0:  
            print(num, "It is a Composite number")  
            break  
    else:  
        print(num, "is a prime number")  
else:  
    print(num, "It is a Composite number")
```

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

```
def isPalindrome(s):  
    return string == string[::-1]  
  
string = input("Enter your string")
```

```
palindrome = isPalindrome(string)
```

```
if palindrome:
```

```
    print(string, "is Palindrome")
```

```
else:
```

```
    print(string, "is not Palindrome")
```

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

```
import numpy as np
```

```
leg_1 = np.array([int(input("Enter Base"))])
```

```
leg_2 = np.array([int(input("Enter Perpendicular"))])
```

```
print(np.hypot(leg_1, leg_2))
```

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

```
def char_frequency(input_string):
```

```
    frequency = {}
```

```
    for char in input_string:
```

```
        if char in frequency:
```

```
            frequency[char] += 1
```

```
        else:
```

```
            frequency[char] = 1
```

```
    for char, count in frequency.items():
```

```
        print(f"'{char}': {count}")
```

```
input_string = input("Enter your string")
```

```
char_frequency(input_string)
```