

**PYTHON – WORKSHEET 1**

**Q1 to Q8 have only one correct answer. Choose the correct option to answer your question.**

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. B) True**

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

- A) 2 B) 4
- C) 0 D) 6

Ans.

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. B) It encloses the lines of code which will be executed if any error occurs while executing the lines of code in**

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) It is used to raise an exception.**

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) in defining a generator**

**Q9 and Q10 have multiple correct answers. Choose all the correct options to answer your question.**

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

- A) \_abc B) 1abc
- C) abc2 D) None of the above

**Ans. A) \_abc**

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

- A) yield B) raise
- C) look-in D) all of these

**Ans. A) yield**

**Q11 to Q15 are programming questions. Answer them in Jupyter Notebook.**

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

```
def factorial(n):  
    if n < 0:  
        return 0  
    elif n == 0 or n == 1:  
        return 1  
    else:  
        fact = 1  
        while(n > 1):  
            fact *= n  
            n -= 1  
        return fact
```

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

Ans.

```
a=int(input('enter the number'))
while True:
    b=list(range(2,a))
    for i in b:
        if a%i==0:
            print(a,'is not a prime number')
        else:
            print(a,'is a prime number')
            break
```

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

Ans.

```
def isPalindrome(str):

    # Run loop from 0 to len/2
    for i in range(0, int(len(str)/2)):
        if str[i] != str[len(str)-i-1]:
            return False
    return True

# main function
s = "teeth"
ans = isPalindrome(s)

if (ans):
    print("Yes")
else:
    print("No")
```

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

**Ans.**

```
import math

a = float(input("Enter base: "))
b = float(input("Enter height: "))
x = float(input("Enter angle: "))

c = math.sqrt(a ** 2 + b ** 2)

print("Hypotenuse =", c)
```

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

**Ans.**

```
str1 = input ("Enter the string: ")
d = dict()
for c in str1:
    if c in d:
        d[c] = d[c] + 1
    else:
        d[c] = 1
print(d)
```