Name- Nikhil Lalwani
Batch- DS2307
Project- Python
Q1) Which of the following operators is used to calculate remainder in a division?
A) # B) & C) % D) \$
A1) C) %
Q2) In python 2//3 is equal to?
A) 0.666 B) 0 C) 1 D) 0.67
A2) B) 0
Q3) In python, 6<<2 is equal to?
A) 36 B) 10 C) 24 D) 45
A3) C) 24
Q4) In python, 6&2 will give which of the following as output?
A) 2 B) True C) False D) 0
A4) A) 2
Q5) In python, 6 2 will give which of the following as output?
A) 2 B) 4 C) 0 D) 6
A5) D) 6
Q6) 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
A6) C) the finally block will be executed no matter if the try block raises an error or not.
Q7) 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
A7) A) It is used to raise an exception.
Q8) 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
A8) C) in defining a generator
Q9) Which of the following are the valid variable names? Choose all the correct options to answer your question
A) _abc B) 1abc C) abc2 D) None of the above
A9) A) _abc
C) abc2
Q10) Which of the following are the keywords in python?

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

A10) A) yield B) raise

```
In [3]: #Q11 Write a python program to find the factorial of a number.
        import math
        number = 5
        factorial = math.factorial(number)
        print("Factorial:", factorial)
        Factorial: 120
In [5]: #Q12 Write a python program to find whether a number is prime or composite
        from sympy import isprime
        num = 7
        if isprime(num):
            print(num, "is a prime number.")
            print(num, "is a composite number.")
        7 is a prime number.
In [6]: #Q13 Write a python program to check whether a given string is palindrome or not.
        string = "radar"
        if string == string[::-1]:
            print("The string is a palindrome.")
        else:
            print("The string is not a palindrome.")
        The string is a palindrome.
In [7]: #Q14 Write a Python program to get the third side of right-angled triangle from two g
        import math
        side1 = 3
        side2 = 4
        side3 = math.hypot(side1, side2)
        print("The length of the third side is:", side3)
        The length of the third side is: 5.0
In [8]: #Q15 Write a python program to print the frequency of each of the characters present
        from collections import Counter
        input string = "hello"
        for char, count in Counter(input_string).items():
            print(f"'{char}': {count}")
```

```
'h': 1
'e': 1
'l': 2
'o': 1
```

In [ ]: #END