**Question 1**

Source Code

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| # Write a program to demonstrate the use of different operators in python.  def operators\_demo(a, b):  print("Addition:", a + b)  print("Subtraction:", a - b)  print("Multiplication:", a \* b)  print("Division:", a / b if b != 0 else "Undefined")  print("Modulus:", a % b if b != 0 else "Undefined")  print("Floor Division:", a // b if b != 0 else "Undefined")  print("Exponentiation:", a \*\* b)  print("Equal:", a == b)  print("Not Equal:", a != b)  print("Greater:", a > b)  print("Smaller:", a < b)  print("Logical AND:", a > 0 and b > 0)  print("Logical OR:", a > 0 or b > 0)  print("Logical NOT:", not(a > 0))  a = int(input("Enter first number: ")) b = int(input("Enter second number: ")) operators\_demo(a, b) |

Output

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| --- |
| Enter first number: 10 Enter second number: 5 Addition: 15 Subtraction: 5 Multiplication: 50 Division: 2.0 Modulus: 0 Floor Division: 2 Exponentiation: 100000 Equal: False Not Equal: True Greater: True Smaller: False Logical AND: True Logical OR: True Logical NOT: False |