Name: Vinayak Kumar Singh

Register No: 23MCA1030

Subject: Python LAB

Question: Operators in Python Code

```
operators.py X
e operators.py > ...
       print("Register Number = 23MCA1030")
   1
   2
       print("Name = Vinayak Kumar Singh")
       # Arithmetic Operators Example
   3
       a = 95
   4
   5
       b = 5
   6
       print("Arithmetic Operators Example")
   7
       addition = a + b
       print("Addition:", addition)
   8
       subtraction = a - b
   9
  10
       print("Subtraction:", subtraction)
       multiplication = a * b
  11
       print("Multiplication:", multiplication)
  12
  13
       division = a / b
       print("Division:", division)
  14
       modulus= a % b
  15
       print("Modulus:", modulus)
  16
  17
       # Assignment Operators Example
  18
  19
       c = 150
  20
       print("Assignment Operators Example")
  21
       print("c value:" ,c)
  22
       c += 5
  23
       print("After Addition Assignment:", c)
       c -= 3
  24
  25
       print("After Subtraction Assignment:", c)
  26
       c *= 4
       print("After Multiplication Assignment:", c)
  27
       c /= 2
  28
       print("After Division Assignment:", c)
  29
       c \% = 3
  30
       print("After Modulus Assignment:", c)
  31
  32
```

```
# Comparison Operators Example
33
    x = 10
34
35
    y = 5
     print("Comparison Operators Example")
36
     print("Equal to Operators (10==5):", x == y)
37
38
     print("Not equal to Operators (10!=5):", x != y)
     print("Less than Operators (10<5):", x < y)</pre>
39
     print("Greater than Operators (10>5):", x > y)
40
     print("Less than or equal to Operators (10<=5):", x <= y)</pre>
41
42
     print("Greater than or equal to Operators (10>=5):", x >= y)
43
44
    # Logical Operators Example
    num1 = 10
45
46
     num2 = 5
47
    print("Logical Operators Example")
     logical and result = num1 > 0 and num2 < 10
48
     print("Logical AND:", logical_and_result)
49
     logical or result = num1 < 0 or num2 > 10
50
     print("Logical OR:", logical_or_result)
51
     logical_not_num1 = not num1 > 0
52
53
     logical_not_num2 = not num2 < 10</pre>
     print("Logical NOT (num1):", logical not num1)
54
     print("Logical NOT (num2):", logical_not_num2)
55
56
     # Identity Operators Example
57
58
    p = [1, 2, 3]
59
     q = p
60
    r = [1, 2, 3]
    print("Identity Operators Example")
61
    result_1 = p is q
62
     result_2 = p is r
63
    print("p is q:", result_1)
64
    print("p is r:", result_2)
65
     not_result_1 = p is not q
66
    not_result_2 = p is not r
67
68
    print("p is not q:", not_result_1)
     print("p is not r:", not_result_2)
69
70
    # Membership Operators Example
71
72 my_list = [1, 2, 3, 4, 5]
73
    print("Membership Operators Example")
74
    in_result_1 = 3 in my_list
75
    in_result_2 = 6 in my_list
     print("3 in my list:", in_result_1)
76
    print("6 in my list:", in_result_2)
77
    not_in_result_1 = 3 not in my_list
78
    not_in_result_2 = 6 not in my_list
79
    print("3 not in my list:", not_in_result_1)
80
81
     print("6 not in my list:", not_in_result_2)
```

Output

```
PROBLEMS OUTPUT
                   TERMINAL
D:\MCA\6. Python Programming + LAB\LAB>python -u "d:\MCA\6. Python Programming + LAB\LAB\operators.py"
Register Number = 23MCA1030
Name = Vinayak Kumar Singh
Arithmetic Operators Example
Addition: 100
Subtraction: 90
Multiplication: 475
Division: 19.0
Modulus: 0
Assignment Operators Example
c value: 150
After Addition Assignment: 155
After Subtraction Assignment: 152
After Multiplication Assignment: 608
After Division Assignment: 304.0
After Modulus Assignment: 1.0
Comparison Operators Example
Equal to Operators (10==5): False
Not equal to Operators (10!=5): True
Less than Operators (10<5): False
Greater than Operators (10>5): True
Less than or equal to Operators (10<=5): False
Greater than or equal to Operators (10>=5): True
Logical Operators Example
Logical AND: True
Logical OR: False
Logical NOT (num1): False
Logical NOT (num2): False
Identity Operators Example
p is q: True
p is r: False
p is not q: False
p is not r: True
Membership Operators Example
3 in my list: True
6 in my list: False
3 not in my list: False
6 not in my list: True
```

END

D:\MCA\6. Python Programming + LAB\LAB>