Python Programs on Operators

11. Arithmetic Operators

```
a = 10
b = 5
print("Add:", a + b)
print("Subtract:", a - b)
print("Multiply:", a * b)
print("Divide:", a / b)
print("Modulus:", a % b)
print("Exponent:", a ** b)
print("Floor Division:", a // b)
```

12. Assignment Operators

```
a = 5
print("Initial a:", a)
a += 2
print("After a += 2:", a)
a *= 3
print("After a *= 3:", a)
a -= 4
print("After a -= 4:", a)
```

13. Comparison/Relational Operators

```
a, b = 10, 20
print("a == b:", a == b)
print("a != b:", a != b)
print("a > b:", a > b)
print("a < b:", a < b)
print("a >= b:", a >= b)
print("a <= b:", a <= b)
```

14. Logical Operators

```python
x, y = True, False

print("x and y:", x and y)

print("x or y:", x or y)

print("not x:", not x)
```

15. Bitwise Operators

```python
a, b = 10, 4

print("a & b:", a & b)

print("a | b:", a | b)

print("a ^ b:", a ^ b)

print("~a:", ~a)

print("a << 2:", a << 2)

print("a >> 2:", a >> 2)
```

16. Membership Operators

```python
my_list = [1, 2, 3, 4, 5]

print("3 in my_list:", 3 in my_list)

print("7 not in my_list:", 7 not in my_list)
```