

## Python Logical, Membership, Comparison, and Assignment Operator Questions

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### Complex Operator Code Snippets (All Operators Used)

1.

```
x = 15
y = 10
z = 5
x += 5
print((x > y or z in [5, 6]) and not (x == 20))    #False
```

2.

```
username = "admin"
roles = ["user", "editor", "admin"]
access_granted = username in roles and username != "guest"
print(access_granted)    #True
```

3.

```
marks = 85
status = "Pass" if marks >= 40 else "Fail"
print(status == "Pass" and marks in range(80, 91))    #True
```

4.

```
items = ["pen", "book", "bottle"]
available = "bottle" in items
stock = 10
stock -= 1
print(available and stock != 0)    #True
```

5.

```
x = 5
y = 5
z = 0
```

```
x *= 2
print(x == 10 and (y in [1, 5]) or not z) #TRUE
```

6.

```
age = 25
id_card = True
is_verified = False
is_verified = age >= 18 and id_card
print(is_verified and not (age < 18)) #TRUE
```

7.

```
login = True
admin = False
privileges = ["read", "write"]
print(("delete" not in privileges) and (login or admin)) #False
```

8.

```
x = 8
y = 12
x %= 5
y //= 3
print(x != y and (x not in [0, 1])) #True
```

9.

```
students = ["Asha", "Ravi", "Mira"]
marks = {"Asha": 78, "Ravi": 65}
print("Mira" in students and students[0] in marks) True
```

10.

```
x = 100
y = 50
x -= 50
y += 10
print((x == y) or (x > y and "Python" not in ["Java", "C++"])) #False
```

## Comparison Operator Examples

1.

```
a = 10  
b = 20  
print(a != b)    #True
```

2.

```
x = 30  
y = 30  
print(x == y)    #True
```

3.

```
age = 18  
print(age >= 18)  #True
```

4.

```
a = 50  
b = 100  
print(a < b)      #True
```

5.

```
score = 75  
print(score >= 60 and score <= 90)    #True
```

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## Logical Operator Examples

1.

```
a = True  
b = False  
print(a and b)    #False
```

2.

```
x = 10
y = 20
print(x < 15 or y > 25)    #True
```

3.

```
flag = False
print(not flag)    #True
```

4.

```
marks = 70
print(marks > 60 and marks < 80)    #True
```

5.

```
has_ticket = True
is_vip = False
print(has_ticket or is_vip)    #True
```

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## Assignment Operator Examples

1.

```
x = 5
x += 2
print(x)    #7
```

2.

```
count = 10
count -= 3
print(count)    #7
```

3.

```
value = 6
value *= 3
print(value)    #18
```

4.

```
num = 40
num //= 4
print(num)    #10
```

5.

```
val = 9
val %= 2
print(val)    #1
```

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## Membership Operator Examples

1.

```
colors = ["red", "green", "blue"]
print("red" in colors)    #True
```

2.

```
text = "hello world"
print("world" in text)    #True
```

3.

```
students = ["Tom", "Jerry"]
print("Spike" not in students)    #True
```

4.

```
chars = "abcdef"
print("g" not in chars)    #True
```

5.

```
numbers = [1, 2, 3, 4, 5]  
print(3 in numbers)
```