Python Logical Operator Questions

```
1.
a=10
b=5
print(a>3 and b<10)
output: True
2.
x=7
print(not(x<10))</pre>
output: False
3.
x=4
y=12
print(x<5 or y<10)
output: True
4.
age=18
has_id=False
print(age>=18 and has_id)
output: False
5.
logged_in=True
admin=False
print(logged_in or admin)
output: True
```

```
6.
is_sunny=False
have_umbrella=True
print(not is_sunny and have_umbrella)
output: True
7.
a=True
b=False
print(not(a or b))
output: False
8.
temp=25
print(temp>20 and temp<30)</pre>
output: True
9.
marks=45
print(not(marks >=50 or marks ==49))
output: True
10.
X=0
Y=10
Print(not x and y>5)
output:True
```

Python Logical, Membership, Comparison, and Assignment Operator Questions

Complex Operator Code Snippets (All Operators Used)

```
1.
x = 15
y = 10
z = 5
x += 5
print ((x > y \text{ or } z \text{ in } [5, 6]) \text{ and not } (x == 20))
output:true
2.
username = "admin"
roles = ["user", "editor", "admin"]
access_granted = username in roles and username != "guest"
print(access granted)
output:true
3.
marks = 85
status = "Pass" if marks >= 40 else "Fail"
print(status == "Pass" and marks in range(80, 91))
output:true
4.
items = ["pen", "book", "bottle"]
available = "bottle" in items
stock = 10
stock -= 1
print(available and stock != 0)
```

```
output:true
5.
x = 5
y = 5
z = 0
1
x *= 2
print(x == 10 \text{ and } (y \text{ in } [1, 5]) \text{ or not } z)
output:true
6.
age = 25
id_card = True
is_verified = False
is_verified = age >= 18 and id_card
print(is_verified and not (age < 18))</pre>
output:true
7.
login = True
admin = False
privileges = ["read", "write"]
print(("delete" not in privileges) and (login or admin))
output:true
8.
x = 8
y = 12
x \% = 5
```

```
y //= 3
print(x != y and (x not in [0, 1]))
output:true
9.
students = ["Asha", "Ravi", "Mira"]
marks = {"Asha": 78, "Ravi": 65}
print("Mira" in students and students[0] in marks)
output:true
10.
x = 100
y = 50
x -= 50
y += 10
print((x == y) or (x > y and "Python" not in ["Java", "C++"]))
output:false
```

2 Comparison Operator Examples

```
1.
a = 10
b = 20
print(a != b)
output:true
2.
x = 30
y = 30
print(x == y)
output:true
3.
age = 18
print(age >= 18)
output:true
4.
a = 50
b = 100
print(a < b)
output:true
5.
score = 75
print(score >= 60 and score <= 90)</pre>
output:true
```

Logical Operator Examples

```
1.
a = True
b = False
print(a and b)
output:false
2.
x = 10
y = 20
print(x < 15 or y > 25)
output:true
3.
flag = False
print(not flag)
output:true
4.
marks = 70
print(marks > 60 and marks < 80)
output:true
5.
has_ticket = True
is_vip = False
print(has_ticket or is_vip)
output:true
```

Assignment Operator Examples

1. x = 5x += 2 print(x) output:7 2. count = 10 count -= 3 print(count) output:7 3. value = 6 value *= 3 print(value) output:18 4. num = 40 num //= 4 print(num) output:10 5. val = 9 val %= 2 print(val) output:1

Membership Operator Examples

```
1.
colors = ["red", "green", "blue"]
print("red" in colors)
output:true
2.
text = "hello world"
print("world" in text)
output:true
3.
students = ["Tom", "Jerry"]
print("Spike" not in students)
output:true
4.
chars = "abcdef"
print("g" not in chars)
output:true
5.
numbers = [1, 2, 3, 4, 5]
print(3 in numbers)
output:true
```