Python Logical Operator Questions

1.

```
a=10
b=5
print(a>3 and b<10)
```

output: True

2.

```
x=7
print(not(x<10))
```

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)

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.

```python
x = 15

y = 10

z = 5

x += 5

print ((x > y or z in [5, 6]) and not (x == 20))
```

output:true

2.

```python
username = "admin"

roles = ["user", "editor", "admin"]

access_granted = username in roles and username != "guest"

print(access_granted)
```

output:true

3.

```python
marks = 85

status = "Pass" if marks >= 40 else "Fail"

print(status == "Pass" and marks in range(80, 91))
```

output:true

4.

```python
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 and (y in [1, 5]) 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))
```

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++"]))
```
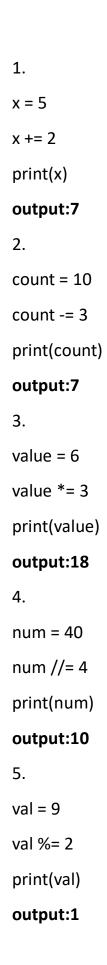
output:false

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)
```

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 = 5
x += 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