1. **What is the output of the following code?**

```
a = 5
b = 10
print(a < b < 20)
```

2. **Predict the output:**

```
x = True
y = False
print(x + y * x)
```

3. **What does this expression evaluate to?**

```
print(4 ** 0 ** 2)
```

4. **Find the result of this bitwise operation:**

```
a = 12
b = 5
print(a ^ b)
```

5. **Guess the output:**

```
print((3 and 0) or (0 and 3))
```

6. **What's the output of this tricky comparison?**

```
print(256 is 256)
print(257 is 257)
```

7. **Evaluate this expression:**

```
a = 7
print(~a + 1)
```

8. **What will this print?**

```
a = True
b = False
print((a or b) and not (a and b))
```

9. **What's the output?**

```
print(10 > 5 == True)
```

10. **Evaluate this expression:**

```
print(2 + 3 * 4 ** 2 // 8 % 3)
```

11. **What does this expression evaluate to?**

```
print(1 << 2 + 1)
```

12. **Predict the output:**

```
a = 3
b = 2
a *= b + 1
print(a)
```

13. **Evaluate this chained comparison:**

```
print(3 < 5 > 2 == 2)
```

14. **Guess the result:**

```
print(10 // 3 * 3 + 1 % 3)
```

15. **What is the result of this?**

```
x = 10
y = 20
print(x & y | x ^ y)
```

16. **Trick with boolean and bitwise:**

```
a = True
b = False
print(a & b or a ^ b)
```

17. **Evaluate this:**

```
x = 8
print(x >> 1 << 2)
```

18. **What does this produce?**

```
print(5 + True * False + not False)
```

19. **Operator confusion:**

```
print((not 0) * (False or 1))
```

20. **Mix of precedence and associativity:**

```
print(4 + 3 * 2 ** 2 // 2 - 1)
```