

### 1. Arithmetic Operators

Scenario: Calculate the total price of items in a shopping cart.

Sample Input:

Item 1 Price: 20

Item 2 Price: 15

Item 3 Price: 10

Output:

Total Price: 45 (20 + 15 + 10)

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### 2. Relational Operators

Scenario: Check if a user is eligible for a discount based on their age.

Sample Input:

Age: 17

Output:

Is Eligible for Discount: false (17 is not greater than or equal to 18)

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### 3. Logical Operators

Scenario: Determine if a user can access a restricted area based on their membership and age.

Sample Input:

Is Member: true

Age: 20

Output:

Can Access: true

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#### 4. Arithmetic Operators (Multiplication)

Scenario: Calculate the area of a rectangle.

Sample Input:

Length: 5

Width: 10

Output:

Area: 50 ( $5 * 10$ )

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#### 5. Relational Operators (Equality Check)

Scenario: Check if a user's input matches the required password.

Sample Input:

User Input: "password123"

Correct Password: "password123"

Output:

Is Password Correct: true (input matches)

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#### 6. Logical Operators (OR)

Scenario: Check if a student has passed based on grades in two subjects.

Sample Input:

Math Grade: 60

English Grade: 55

Output:

Has Passed: true

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## 7. Arithmetic Operators (Division)

Scenario: Calculate the average score of a student.

Sample Input:

Score 1: 85

Score 2: 90

Score 3: 95

Output:

Average Score: 90  $((85 + 90 + 95) / 3)$

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## 8. Relational Operators (Less Than)

Scenario: Check if a number is less than a certain threshold.

Sample Input:

Number: 45

Threshold: 50

Output:

Is Less Than Threshold: true

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## 9. Logical Operators (NOT)

Scenario: Check if a user is not logged in.

Sample Input:

Is Logged In: false

Output:

Is Not Logged In: true

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#### 10. Arithmetic Operators (Modulus)

Scenario: Determine if a number is even or odd.

Sample Input:

Number: 10

Output:

Is Even: true

Is Odd: false

Note: Use only operators,don't overthink it. Don't use if-else statements; just provide the logic.