

MODULE FIVE: CONDITIONALS

1. Conditional operators:

- a. Equals (==)
- b. Not Equals (!=)
- c. Greater Than (>)
- d. Greater Than or Equal To
- e. Less Than, Less Than or Equal To
- f. !=, ==, >=, <=, >, <

Do you think any of these operators relate to AND or OR from boolean logic? How can we combine two of the other conditional operators to create a Greater Than or Equal To operator? Can we combine these operators to specify that a “teenager” from modules two and three is in the range 13 to 19, rather than how we had falsely stated, greater than 12?

2. Control Flow Statements

- a. **if**
- b. **else if**
 - i. can only be used after one or more if statements
- c. **else**
 - i. can only be used after one or more if statements and 0 or more else if statements
- d. **while**
 - i. require initial condition (counter = 0, condition: a < b), body (increment counter, change a), and final condition (counter = some number, a is not < b)

CHALLENGE ONE:

Let's build a Calculator class! We will use if, else if, else, while, and conditional operators.

The Calculator must have the following capabilities:

1. A plus B
2. absolute value(A)
3. A mod B
4. A isEven()
5. A times B with addition (while while)
6. Bonus: A divided by B with subtraction