6. Basic Timer Countdown

- **Objective**: Set a timer for a specified number of seconds, then count down to zero and display a "Time's Up" message.

- **Steps for the Algorithm**:

    1. **Display instructions**: Explain how the timer works.

    2. **Get countdown time**: Ask the user to input a number of seconds.

    3. **Validate input**: Ensure the input is a positive integer.

    4. **Start countdown**: Use a loop to decrement the time by one second.

    5. **Display countdown**: Show the remaining time each second.

    6. **End the timer**: When the countdown reaches zero, display "Time's Up."

To create an absolute reference in Excel on a Mac, you can use the following method:

1.   Type your formula as you normally would (e.g., =A1 + B1).

2.   Convert a cell reference to absolute by clicking on the cell reference within the formula and pressing Command (⌘) + T.

   - **Pressing Command + T repeatedly will cycle through the different types of references:**

     - **A1 (absolute reference for both row and column),**

     - **A$1 (absolute reference for the row only),**

     - **$A1 (absolute reference for the column only),**

     - **A1 (relative reference).**

3.   Confirm the formula by pressing Enter.

   Using absolute references ensures that your cell references remain fixed when copying the formula to other cells.

Flowchart Interpretation:

1.   Start: Begin the process.

2.   Input number: User inputs a number.

3.   Decision: The program checks whether the number is divisible by 2 (i.e., number % 2 == 0).

4.   Yes/No paths:

   - **If Yes, the number is even.**

   - **If No, the number is odd.**

5.   **End: The program finishes.**

Would you like to see a visual representation of this example?