Exercise 18:

### 1. ****Processing Step by Step****

1. **Input the total weight of cement**: The user inputs the total weight in tons.
2. **Calculate the number of full trucks**:
   * Use integer division to calculate how many full trucks are needed. This is done by dividing the total weight by the capacity of one truck (10 tons).
3. **Check for any remainder**:
   * Use the modulus operator to determine if there is any leftover cement that doesn't fill a complete truck.
4. **Add an extra truck if needed**:
   * If there is any remainder (i.e., cement that doesn't exactly fit into the trucks), add one more truck.
5. **Display the result**:
   * Show the user the number of trucks required to transport the total weight of cement.

### 2. ****Pseudocode Description****

Here is the pseudocode for calculating the number of trucks needed:

plaintext

START

// Step 1: Input the total weight of cement

Input total\_weight

// Step 2: Calculate the number of full trucks

trucks = total\_weight // 10

// Step 3: Check if there is any remainder cement

remainder = total\_weight % 10

// Step 4: Add an extra truck if remainder exists

IF remainder > 0 THEN

trucks = trucks + 1

ENDIF

// Step 5: Output the number of trucks needed

Print "Number of trucks needed: ", trucks

END