Exercise 21:

### 1. ****Describe the Process Step by Step****

1. **Input the number of paint cans**: The customer provides the total number of cans they wish to purchase.
2. **Calculate the total cost**:
   * Multiply the number of cans by the price per can (350,000 VND).
3. **Determine the number of hats**:
   * Divide the number of cans by 3 to get the number of hats. Use integer division (i.e., ignore the remainder).
4. **Calculate the remaining cans**:
   * Find the remainder when dividing the number of cans by 3 (this gives the cans that cannot form full groups of 3).
5. **Calculate the number of pens**:
   * Multiply the remaining cans by 2 to get the total number of pens.
6. **Output the results**:
   * Display the total cost of the paint.
   * Display the number of hats and pens the customer will receive.

### 2. ****Describe the Process Steps through Flowcharts****

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Description automatically generated

### 3. ****Describe the Process Steps through Pseudocode****

plaintext

START

// Step 1: Input the number of paint cans

Input number\_of\_cans

// Step 2: Calculate the total cost of the paint

total\_cost = number\_of\_cans \* 350000

// Step 3: Calculate the number of hats

hats = number\_of\_cans // 3 // Integer division to get the number of hats

// Step 4: Calculate the remaining cans

remaining\_cans = number\_of\_cans % 3 // Remainder gives cans that can't form groups of 3

// Step 5: Calculate the number of pens

pens = remaining\_cans \* 2 // 2 pens per remaining can

// Step 6: Output the results

Print "Total cost: ", total\_cost

Print "Number of hats: ", hats

Print "Number of pens: ", pens

END