

Task 1: Word Counter

Description:

Ask the user to input a sentence. Count the total number of words and print each word along with its number of letters.

Input:

```
let sentence = "JavaScript is fun";
```

Expected Output:

```
Total words: 3
JavaScript => 10 letters
is => 2 letters
fun => 3 letters
```

Task 2: Group Users by Age

Description:

Given an array of users (objects), categorize them into age groups:

- "Young": age < 25
- "Middle": 25 <= age <= 40
- "Old": age > 40

Input:

```
let users = [
  {name: "Ali", age: 22},
  {name: "Sara", age: 28},
  {name: "Mona", age: 35},
  {name: "Ahmed", age: 45}
];
```

Expected Output:

```
{
  "Young": [{name: "Ali", age: 22}],
  "Middle": [{name: "Sara", age: 28}, {name: "Mona", age: 35}],
  "Old": [{name: "Ahmed", age: 45}]
}
```

Task 3: Flatten and Count Products

Description:

Given an array of categories, each containing products (nested arrays), do the following:

1. Flatten all products into a single array.
2. Count how many times each product appears.
3. Return an object where the keys are product names and values are their counts.

Input:

```
let categories = [
  {category: "Fruits", products: ["Apple", "Banana", "Apple"]},
  {category: "Vegetables", products: ["Carrot", "Apple"]},
  {category: "Dairy", products: ["Milk", "Cheese"]}
];
```

Expected Output:

```
{
  "Apple": 3,
  "Banana": 1,
  "Carrot": 1,
  "Milk": 1,
  "Cheese": 1}
```