# 1. Find the Sum of All Elements in an Array

#### **Problem Statement:**

Write a program to read n integers from the user, store them in an array, and calculate the sum of all elements.

#### **Expected Input:**

```
Enter the number of elements: 5
Enter 5 elements: 10 20 30 40 50
```

#### **Expected Output:**

```
Sum of array elements = 150
```

#### 2. Count Even and Odd Numbers in the Array

#### **Problem Statement:**

Read n integers into an array and count how many are even and how many are odd.

#### **Expected Input:**

```
Enter the number of elements: 6
Enter 6 elements: 1 2 3 4 5 6
```

## **Expected Output:**

```
Even count = 3
Odd count = 3
```

## 3. Reverse the Array

#### **Problem Statement:**

Take an array from the user and display its elements in reverse order.

#### **Expected Input:**

```
Enter the number of elements: 5
Enter 5 elements: 11 22 33 44 55
```

# **Expected Output:**

```
Array in reverse order: 55 44 33 22 11
```

## 4. Search for an Element in the Array

#### **Problem Statement:**

Take an array and an element from the user, and check if the element exists in the array.

#### **Expected Input:**

```
Enter the number of elements: 5
Enter 5 elements: 10 20 30 40 50
```

Enter element to search: 30

# **Expected Output:**

Element found at position: 3

(Position is 1-based)

# 5. Copy Elements from One Array to Another

# **Problem Statement:**

Take an array from the user and copy its elements into another array.

# **Expected Input:**

Enter the number of elements: 4
Enter 4 elements: 1 2 3 4

#### **Expected Output:**

Elements copied to new array: 1 2 3 4