

# Arrays

## Tasks:

1. Make a program for handling an integer array with a maximum of 50 elements with the following options:
  1. **Add a new element to the array**
    - Enter the new element
    - Increment the counter of elements in the array
  2. **Display all elements of the array**
  3. **Display n<sup>th</sup> element of the array**
    - The user enters the index for the element to be displayed
  4. **Find an element and display its index**
    - The user enters the value to be found
    - If the element with that value was found, display its index
    - If there is no such element in the array, display -1
  5. **Modify n<sup>th</sup> element of the array**
    - The user enters the index of the element to be modified
    - The user enters the new value for the element on the specified index
  6. **Erase n<sup>th</sup> element of the array**
    - The user enters the index of the element to be deleted
    - All elements after the n<sup>th</sup> are moved to the previous index, and the last element is overwritten with 0 and the counter of the elements is decremented
  7. **Display the value and index of the minimal element in the array**
    - Find the minimal element and display its value
    - Display the index of the minimal element
  8. **Sum of all array elements**
    - Calculate and display the sum of values of all elements of the array
  0. **Exit program**