

4. Write a program to get the largest element of an array

Aim: To find the largest element of an array

Program:

```
def find_largest_element(arr):
```

```
    max_element = arr[0]
```

```
    for i in range(1, len(arr)):
```

```
        if arr[i] > max_element:
```

```
            max_element = arr[i]
```

```
    return max_element
```

```
# Test the function
```

```
array = [10, 30, 20, 50, 40]
```

```
largest_element = find_largest_element(array)
```

```
print("The largest element in the array is:", largest_element)
```

Output:

```
The largest element in the array is: 50
```

```
=== Code Execution Successful ===
```

Time complexity:  $O(n)$