

1. Implement the **linear search** algorithm.

Input:

Array Size: 6

Values: 5, 6, 8, 1, 20, 33.

Test Case: 2

Search Element: 33 Output: Found at index 6

Search Element: 29 Output: Not Found

2. Implement the **binary search** algorithm.

Input:

Array Size: 6

Values: 1, 5, 6, 8, 20, 33.

Test Case: 2

Search Element: 33 Output: Found at index 6

Search Element: 29 Output: Not Found

3. Implement the **insertion sort** algorithm.

Input:

Array Size: 10

Values: 20, 29, 22, 11, 6, 8, 2, 1, 5, 11

Output: 1, 2, 5, 6, 8, 11, 11, 20, 22, 29

4. Implement the **selection sort** algorithm.

Input:

Array Size: 10

Values: 20, 29, 22, 11, 6, 8, 2, 1, 5, 11

Output: 1, 2, 5, 6, 8, 11, 11, 20, 22, 29

5. Implement the **bubble sort** algorithm.

Input:

Array Size: 10

Values: 20, 29, 22, 11, 6, 8, 2, 1, 5, 11

Output: 1, 2, 5, 6, 8, 11, 11, 20, 22, 29