Objectives: 1
- Array list using vector library

Question 1: Write a program to build array list with using a vector library. Array list dimension will be 5 for example. Expected output is given in below. **Hint**: For reverse output use vector class functions with iterator (begin and end pointer of array).

Example output:

```
Size of vector is: 5
Vector elements are given below :
0 1 2 3 4

Size of vector is: 6
Updated Vector elements are given below :
20 0 1 2 3 4

Output of reverse array: 4 3 2 1 0 20
Output of after remove last array element: 20 0 1 2 3
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```

Question 2: Write a program to build array list with using a vector library. Array list dimension will be 5 for example. But it can be changed. Expected output is given in below.

Note: Bubble sort and Insertion sort algorithms must be implemented using vector library.

Hint 1: Bubble sort is a sorting algorithm that compares two adjacent elements and swaps them until they are in the intended order.
Hint 2: Insertion sort is a technique in which we start from the second element of the list. We compare the second element to its previous (1st) element and place it in its proper place. In the next pass, for each element, we compare it to all its previous elements and insert that element at its proper place.

Example output:

```
Size of vector is: 5
Vector elements are given below :
20 15 5 10 1

Enter the value for insertion: 35
Added to begin of the array
35 20 15 5 10 1

Enter the value for insertion: 68
Added to end of the array
35 20 15 5 10 1 68

Bubble sort ...
Sorted Element List ...
1 5 10 15 20 35 68

Insertion sort ...
Sorted Element List ...
68 35 20 15 10 5 1
```