

### 1. push(int x)

Adds a new element to the **top of the stack**.

- Checks if the stack is full (i.e.,  $\text{top} == n - 1$ ).
  - If full, prints "Stack overflow!" and exits the function.
- Otherwise:
  - Increments the top index using  $\text{++top}$ .
  - Stores the value x at  $\text{arr}[\text{top}]$ .

### 2. pop()

Removes the **top element** from the stack.

- Checks if the stack is empty (i.e.,  $\text{top} == -1$ ).
  - If empty, prints "Empty stack!" and exits the function.
- Otherwise:
  - Decrements top, effectively "removing" the top value.

### 3. Display()

Displays all elements of the stack from **top to bottom**.

- Checks if the stack is empty.
  - If empty, prints "Empty stack!" and exits the function.
- Otherwise:
  - Loops from top to 0 and prints each element in the array.
  - This mimics viewing the stack from the most recent item to the oldest.

**Output:**

```
Stack elements are: 5 4 3 2
After removing the topest element.
Stack elements are: 4 3 2
```