

INPUT initial size: 2

--- Stack Menu ---

1. Push

2. Pop

3. Display

4. Exit

Choice: 1

Enter value to push: apple

apple pushed to stack.

--- Stack Menu ---

1. Push

2. Pop

3. Display

4. Exit

Choice: 1

Enter value to push: banana

banana pushed to stack.

--- Stack Menu ---

1. Push

2. Pop

3. Display

4. Exit

Choice: 1

Enter value to push: cherry

Stack resized to capacity: 4

cherry pushed to stack.

--- Stack Menu ---

1. Push

2. Pop

3. Display

4. Exit

Choice: 2

cherry popped from stack.

--- Stack Menu ---

1. Push

2. Pop

3. Display

4. Exit

Choice: 2

banana popped from stack.

--- Stack Menu ---

1. Push

2. Pop

3. Display

4. Exit

Choice: 2

apple popped from stack.

--- Stack Menu ---

1. Push

2. Pop

3. Display

4. Exit

Choice: 2
Exception: Cannot pop from empty stack.

--- Stack Menu ---

1. Push
2. Pop
3. Display
4. Exit

Choice: 4
Program exiting...
INPUT initial size: 2

--- Stack Menu ---

1. Push
2. Pop
3. Display
4. Exit

Choice: 1
Enter value to push: 1

1 pushed to stack.

--- Stack Menu ---

1. Push
2. Pop
3. Display
4. Exit

Choice: 1
Enter value to push: 2

2 pushed to stack.

--- Stack Menu ---

1. Push
2. Pop
3. Display
4. Exit

Choice: 1
Enter value to push: 3
Stack resized to capacity: 4
3 pushed to stack.

--- Stack Menu ---

1. Push
2. Pop
3. Display
4. Exit

Choice: 1
Enter value to push: 4

4 pushed to stack.

--- Stack Menu ---

1. Push
2. Pop
3. Display
4. Exit

Choice: 3
Stack elements (top to bottom): [4, 3, 2, 1]

--- Stack Menu ---

```
1. Push
2. Pop
3. Display
4. Exit
Choice: 1
Enter value to push: 5
Stack resized to capacity: 8
5 pushed to stack.
```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Choice: 1
Enter value to push: 6

6 pushed to stack.
```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Choice: 1
Enter value to push: 7

7 pushed to stack.
```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Choice: 1
Enter value to push: 8

8 pushed to stack.
```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Choice: 1
Enter value to push: 9
Stack resized to capacity: 10
9 pushed to stack.
```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Choice: 1
Enter value to push: 10

10 pushed to stack.
```

```
--- Stack Menu ---
1. Push
```

```
2. Pop
3. Display
4. Exit
Choice: 1
Enter value to push: 11
Exception: Stack overflow: Maximum capacity reached.

--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Choice: 3
Stack elements (top to bottom): [ 10, 9, 8, 7, 6, 5, 4, 3, 2, 1 ]

--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Choice: 4
Program exiting...
```