

## 🔥 Stack Implementation in C++ – Breakdown

### ❏ Stack Concept (LIFO) 📦

1. A stack follows the Last In, First Out (LIFO) principle.
2. Think of it like a stack of plates 🍽️ — the last one placed is the first one removed.

### ❏ Defining the Stack & Variables 📌

4. `#define MAX 10` → Sets the maximum size of the stack.
5. `int stack[MAX]` → Array to store stack elements.
6. `int TOP = -1` → Tracks the last added element (initially empty).

### 7. ❏ Push Function (Adding Elements) 🚀

8. Checks if the stack is full (`TOP == MAX - 1`), then prints "Stack is full".
9. If not full, increments `TOP` and stores the new element in `stack[TOP]`.

### 10. ❏ Taking Input & Storing in Stack 📝

11. User enters `MAX` (10) elements, which are pushed into the stack one by one.

### 12. ❏ Printing the Stack Elements 🖨️

13. A loop runs from 0 to `TOP`, printing all stored elements in order.

### ❏ Final Output 🎯

Displays all elements in the stack, confirming they were stored successfully! ✅

🚀 Now you can easily slay DSA with stacks! 🔥