**1. push() - Insert an Element into the Stack**

**Algorithm:**

1. Take input for the element x to be inserted.
2. Check if top == N - 1 (i.e., stack is full).
   * If **true**, print "Stack Overflow!" and return.
3. Otherwise:
   * Increment top by 1.
   * Store x at stack[top].

**2. pop() - Remove an Element from the Stack**

**Algorithm:**

1. Check if top == -1 (i.e., stack is empty).
   * If **true**, print "Underflow!" and return.
2. Otherwise:
   * Print the element at stack[top] as it is being removed.
   * Decrement top by 1.

**3. display() - Display Stack Elements**

**Algorithm:**

1. If top == -1:
   * Print "Stack is empty!" and return.
2. Otherwise:
   * Traverse the stack from top to 0.
   * Print each element stack[i].

**4. main() - Menu-driven Execution**

**Algorithm:**

1. Display a menu with options:
   * 1: Push
   * 2: Pop
   * 3: Display
   * 4: Exit
2. Read the user's choice.
3. Perform the corresponding operation using a switch statement:
   * push() for inserting an element.
   * pop() for removing an element.
   * display() for showing the stack.
   * exit(0) to terminate the program.
4. Repeat the menu until the user chooses to exit.