```
#include <iostream>
#include <string>
using namespace std;
const int SIZE = 100;
class Stack {
   string arr[SIZE];
   int top;

public:
   Stack() { top = -1; }
   bool isEmpty() { return top == -1; }
   bool isFull() { return top == SIZE - 1; }

   void push(string val) {
      if (isFull()) {
         cout << "Stack Overflow!" << endl;
         return;
      }
      arr[++top] = val;
   }

   string pop() {
      if (isEmpty()) {
         return "";
      }
      return arr[top--];
   }

   string peek() {
      if (isEmpty()) return "";
      return arr[top];
```

```
    }

    void clear() { top = -1; }
};

class Editor {
    Stack undoStack, redoStack;
    string text;

public:
    void addOperation(const string& op) {
        undoStack.push(text);
        text += op;
        redoStack.clear();
    }

    void undo() {
        if (undoStack.isEmpty()) {
            cout << "Nothing to undo!" << endl;
            return;
        }
        redoStack.push(text);
        text = undoStack.pop();
    }

    void redo() {
        if (redoStack.isEmpty()) {
            cout << "Nothing to redo!" << endl;
            return;
        }
        undoStack.push(text);
```

```
        text = redoStack.pop();
    }

    void showText() {
        cout << "Current Text: " << text << endl;
    }
};

int main() {
    Editor editor;
    int choice;
    string input;

    cout << "=== Simple Text Editor (Undo/Redo) ===" << endl;

    do {
        cout << "\nMenu:" << endl;
        cout << "1. Add Text" << endl;
        cout << "2. Undo" << endl;
        cout << "3. Redo" << endl;
        cout << "4. Show Current Text" << endl;
        cout << "5. Exit" << endl;
        cout << "Enter choice: ";
        cin >> choice;

        cin.ignore();

        switch (choice) {
            case 1:
                cout << "Enter text to add: ";
                getline(cin, input);
```

```
            editor.addOperation(input);
            break;
        case 2:
            editor.undo();
            break;
        case 3:
            editor.redo();
            break;
        case 4:
            editor.showText();
            break;
        case 5:
            cout << "Exiting program..." << endl;
            break;
        default:
            cout << "Invalid choice!" << endl;
      }
   } while (choice != 5);

   return 0;
}
```

Output....

```
Menu:
1. Add Text
2. Undo
3. Redo
4. Show Current Text
5. Exit
Enter choice: 1
Enter text to add: Shubham
```

Menu:

1. Add Text

2. Undo

3. Redo

4. Show Current Text

5. Exit

Enter choice: 1

Enter text to add: Mokashi

Menu:

1. Add Text

2. Undo

3. Redo

4. Show Current Text

5. Exit

Enter choice: 4

Current Text: ShubhamMokashi

Menu:

1. Add Text

2. Undo

3. Redo

4. Show Current Text

5. Exit

Enter choice: 2

Menu:

1. Add Text

2. Undo

3. Redo

4. Show Current Text

5. Exit

Enter choice: 4

Current Text: Shubham

Menu:

1. Add Text

2. Undo

3. Redo

4. Show Current Text

5. Exit

Enter choice: 3

Menu:

1. Add Text

2. Undo

3. Redo

4. Show Current Text

5. Exit

Enter choice: 4

Current Text: ShubhamMokashi

Menu:

1. Add Text

2. Undo

3. Redo

4. Show Current Text

5. Exit

Enter choice: 5

Exiting program...