

```

#include <stdio.h>
#include <conio.h>
#include <stdlib.h>

#define SIZE 10

void push(int);
void pop();
void display();

int stack[SIZE], top = -1;

void main()
{
    int value, choice;
    clrscr();

    while (1) {
        printf("\n\n****MENU****\n");
        printf("1. Push\n2. Pop\n3. Display\n4. Exit\n");
        printf("Enter your Choice: "); // fixed: removed extra '\
        scanf("%d", &choice);

        switch (choice) {
            case 1:
                printf("Enter the value to be inserted: ");
                scanf("%d", &value); // fixed: was &choice, should be &value
                push(value);
                break;

            case 2:
                pop();
                break;

            case 3:
                display();
                break;

            case 4:
                exit(0);

            default:
                printf("\nWrong Selection!!! Try again!!!");
        }
    }
}

```

```
    }  
}
```

```
void push(int value) {  
    if (top == SIZE - 1) {  
        printf("\nStack Overflow! Cannot push %d\n", value);  
    } else {  
        top++;  
        stack[top] = value;  
        printf("\n%d pushed to stack.\n", value);  
    }  
}
```

```
void pop() {  
    if (top == -1) {  
        printf("\nStack Underflow! No elements to pop.\n");  
    } else {  
        printf("\n%d popped from stack.\n", stack[top]);  
        top--;  
    }  
}
```

```
void display() {  
    int i;  
    if (top == -1) {  
        printf("\nStack is empty.\n");  
    } else {  
        printf("\nStack elements are:\n");  
  
        for (i = top; i >= 0; i--) {  
            printf("%d\n", stack[i]);  
        }  
    }  
}
```

\*\*\*\*\* MENU \*\*\*\*\*

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

Enter your Choice: 1

Enter the value to be inserted: 10

10 pushed to stack.

\*\*\*\*\* MENU \*\*\*\*\*

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

Enter your Choice: 3

Stack elements are:

10

\*\*\*\*\* MENU \*\*\*\*\*

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

Enter your Choice: 1

Enter the value to be inserted: 50

50 pushed to stack.

\*\*\*\*\* MENU \*\*\*\*\*

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

Enter your Choice: 2

50 popped from stack.