

```
#include <stdio.h>
```

```
int stack[100];
```

```
int top = 0;
```

```
void push(int value) {
```

```
    if (top > 99) {
```

```
        printf("Stack overflow\n");  
        return;
```

```
    }
```

```
    stack[top] = value;
```

```
    top++;
```

```
}
```

```
int pop() {
```

```
    if (top <= 0) {
```

```
        printf("Stack Underflow\n");  
        return;
```

```
    }
```

```
    top--;
```

```
    value = stack[top];
```

```
    stack[top] = 0;
```

```
    return value;
```

```
}
```

```
void display() {
```

```
    int i;
```

```
    if (top == 0) {
```

```
        printf("Null\n");  
        return;
```

```
    }
```

```
    for (i = top - 1; i >= 0; i--) {
```

```
        printf("%d ", stack[i]);
```

```
    }
```

```
    printf("\n");
```

```

int main() {
    int option;
    int value;
    while(1) {
        printf("Enter the option | n 1 - push to stack | n 2 - pop from stack | n 3 - display stack | n 4 - exit | n ");
        scanf("%d", &option);
        if(option == 4) {
            return 0;
        } else {
            switch(option) {
                case 1:
                    scanf("%d", &value);
                    push(value);
                    break;
                case 2:
                    value = pop();
                    printf("Popped value = %d | n", value);
                    break;
                case 3:
                    display();
                    break;
                default:
                    printf("Enter options given | n | n ");
                    break;
            }
        }
    }
}

```