

## Stack

```
#include<stdio.h>
#define N 5
int stack[N];
int top = -1;

void PUSH() {
    int x;
    printf("Enter data ");
    scanf("%d", &x);
    if (top == N-1) {
        printf("Stack overflow");
    }
    else {
        top++;
        stack[top] = x;
    }
}
```

```
void POP() {
    int item;
    if (top == -1) {
        printf("Stack underflow");
    }
    else {
        item = stack[top];
        top--;
        printf("%d", item);
    }
}
```

```
void PEAK() {
    if (top == -1) {
        printf("Stack Underflow");
    }
    else {
        printf("%d", stack[top]);
        top--;
    }
}

int main() {
    int choice;
    printf("1. Push \n 2. Pop \n 3. Peek \n 4. Exit \n");
    scanf("%d", &choice);
    while (choice != 4) {
        switch (choice) {
            case 1:
                PUSH();
                break;
            case 2:
                POP();
                break;
            case 3:
                PEAK();
                break;
            default:
                printf("Invalid choice");
                break;
        }
        printf("Enter a choice");
        scanf("%d", &choice);
    }
    return 0;
}
```

Op?

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

Enter a choice :

Enter data 10

Enter a choice :

Enter data 20

Enter a choice :

Enter data 30

Enter a choice :

Enter data 40

Enter a choice :

Enter data 50

Enter a choice :

Enter data 60

Stack Overflow

Enter a choice 2

50

Enter a choice 4

Exit

MR  
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