

```
stack.c x
printf("top element:%d\n",stack[top]);
}
int main()
{
    int choice,value;
    do{
        printf("\n stack operations");
        printf("\n 1.push");
        printf("\n pop");
        printf("\n peek");
        printf("\n exit");
        printf("\n enter your choice");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:
                printf("\n enter the value to push");
                scanf("%d",&value);
                push(value);
                break;
            case 2:
                pop();
                break;
            case 3:
                peek();
                break;
            case 4:
                printf("\n exiting../n");
                break;
            default:
                printf("\n invalid choice");
        }
    }
    while(choice!=4);
    return 0;
}
```

```
#include<stdio.h>
#define max_size 10
int stack[max_size];
int top=-1;
void push(int value)
{
    if(top>=max_size-1)
    {
        printf("\n stack over flow");
        return ;
    }
    stack[++top]=value;
    printf("\n pushed %d onto stack",value);
}
void pop()
{
    if(top== -1)
    {
        printf("\n stack underflow\n");
        return;
    }
    printf("\n popped %d from the stack",stack[top--]);
}
void peek()
{
    if(top== -1)
    {
        printf("\n stack is empty");
        return;
    }
    printf("top element:%d\n",stack[top]);
}
int main()
{
    int choice,value;
    do{
```