

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

```
#define MAX 5
```

```
int top=-1,stack[MAX];
```

```
void push();
```

```
void pop();
```

```
void display();
```

```
void main()
```

```
{
```

```
    int ch;
```

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

```
    printf("\n1.Push\n2.Pop\n3.Display\n4.Exit");
```

```
    do
```

```
    {
```

```
        printf("\nEnter your choice:");
```

```
        scanf("%d",&ch);
```

```
        switch(ch)
```

```
        {
```

```
            case 1: push();
```

```
                break;
```

```
            case 2: pop();
```

```
                break;
```

```
            case 3: display();
```

```
                break;
```

```
        }
```

```
    }  
    }while(ch!=4);  
}  
  
void push()  
{  
    int val;  
  
    if(top==MAX-1)  
    {  
        printf("\nStack is full!!");  
    }  
    else  
    {  
        printf("\nEnter element to push:");  
        scanf("%d",&val);  
        top=top+1;  
        stack[top]=val;  
    }  
}  
  
void pop()  
{  
    if(top==-1)  
    {  
        printf("\nStack is empty!!");  
    }  
    else  
    {  
        top=top-1;  
    }  
}  
  
void display()
```

```
}
else
{
    printf("\nEnter element to push:");
    scanf("%d",&val);
    top=top+1;
    stack[top]=val;
}
}

void pop()
{
    if(top==-1)
    {
        printf("\nStack is empty!!");
    }
    else
    {
        top=top-1;
    }
}

void display()
{
    int i;

    if(top==-1)
    {
        printf("\nStack is empty!!");
    }
    else
    {
        for(i=top;i>=0;--i)
            printf("%d\n",stack[i]);
    }
}
```