



```

-;
void push()
{
    int x;
    printf("Enter data: ");
    scanf("%d",&x);
    if(top==N-1)
    {
        printf("Overflow,cannot enter data\n");
    }
    else
    {
        top++;
        stack[top]=x;
        printf("%d pushed into the stack \n" ,x);
    }
}

void pop()
{
    int item;
    if (top==--1)
    {
        printf("Underflow,the stack is empty\n");
    }
    else
    {
        item=stack[top];
        top--;
        printf("Popped item: %d\n",item);
    }
}

void peek()
{
    if(top==--1)
    {
        printf("Underflow \n");
    }
    else
    {
        printf("Top item: %d",stack[top]);
    }
}

```

```
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
1
Enter data: 2
2 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
1
Enter data: 4
4 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
1
Enter data: 5
5 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
1
Enter data: 7
7 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
1
Enter data: 10
10 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
1
Enter data: 12
Overflow,cannot enter data
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
2
Popped item: 10
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
2
Popped item: 7
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
2
Popped item: 5
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
2
Popped item: 4
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
2
Popped item: 2
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
2
Underflow,the stack is empty
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
3
Underflow
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
4
Exiting....
```