

```

1  #include<iostream>
2  #include<stack>
3
4  using namespace std;
5
6  stack <int> Stack1;
7  stack <int> Stack2;
8
9  void enqueue(int k)
10 {
11     Stack1.push(k);
12 }
13
14 int dequeue()
15 {
16     if(Stack2.empty() && Stack1.empty())
17     {
18         cout<<"Underflow";
19         return 0;
20     }
21
22
23     if(!Stack2.empty())
24     {
25         int pop=Stack2.top();
26         Stack2.pop();
27         return pop;
28     }
29
30     else
31     {
32         while(!Stack1.empty())
33         {
34             Stack2.push(Stack1.top());
35             Stack1.pop();
36         }
37         int pop=Stack2.top();
38         Stack2.pop();
39         return pop;
40     }
41 }
42
43
44 int main()
45 {
46
47     enqueue(1);
48     enqueue(2);
49     enqueue(3);
50     cout<<"top of stack 1 is"<<Stack1.top();
51     cout<<"\nsize of stack 1 is"<<Stack1.size();
52     dequeue();
53     dequeue();
54     enqueue(20);
55     enqueue(30);
56     dequeue();
57     dequeue();
58     dequeue();
59     dequeue(); // underflow condition reached//
60
61
62
63
64
65 }

```