

20) IMPLEMENTING STACKS USING 2 QUEUES

This is the standard sum of the stacks.

CODE OF THE PROGRAM:

```
void QueueStack :: push(int x)
{
    if(q1.size()==0 && q2.size()==0){
        q1.push(x);
    }
    else if(q1.size()==0){
        q2.push(x);
    }
    else if(q2.size()==0){
        q1.push(x);
    }
}

//Function to pop an element from stack using two queues.
int QueueStack :: pop()
{
    if(q1.size()==0 && q2.size()==0){
        return -1;
    }
    else if(q1.size()==0){
        int temp;
        while(q2.size()!=0){
            temp=q2.front();
            q2.pop();
            if(q2.size()!=0){
                q1.push(temp);
            }
        }
        return temp;
    }
    else if(q2.size()==0){
        int temp;
        while(q1.size()!=0){
            temp=q1.front();
            q1.pop();
            if(q1.size()!=0){
                q2.push(temp);
            }
        }
        return temp;
    }
}
```