class MyQueue {

/\*\* Initialize your data structure here. \*/

Stack<Integer> s1 = new Stack<>();

Stack<Integer> s2 = new Stack<>();

int front;

public MyQueue() {

}

/\*\* Push element x to the back of queue. \*/

public void push(int x) {

if (s1.empty())

front = x;

s1.push(x);

}

/\*\* Removes the element from in front of queue and returns that element. \*/

public int pop() {

if (s2.isEmpty()) {

while (!s1.isEmpty())

s2.push(s1.pop());

}

return s2.pop();

}

/\*\* Get the front element. \*/

public int peek() {

if (!s2.isEmpty()) {

return s2.peek();

}

return front;

}

/\*\* Returns whether the queue is empty. \*/

public boolean empty() {

return s1.isEmpty() && s2.isEmpty();

}

}

/\*\*

\* Your MyQueue object will be instantiated and called as such:

\* MyQueue obj = new MyQueue();

\* obj.push(x);

\* int param\_2 = obj.pop();

\* int param\_3 = obj.peek();

\* boolean param\_4 = obj.empty();

\*/