#include #include

using namespace std;

class MyStack { private: queue q1, q2;

public: MyStack() {

}

void push(int x)

{

q1.push(x);

}

int pop()

{

while (q1.size() > 1)

{

q2.push(q1.front());

q1.pop();

}

int topElement = q1.front();

q1.pop();

swap(q1, q2);

return topElement;

}

int top()

{

while (q1.size() > 1)

{

q2.push(q1.front());

q1.pop();

}

int topElement = q1.front();

q2.push(topElement);

q1.pop();

swap(q1, q2);

return topElement;

}

bool empty()

{

return q1.empty() && q2.empty();

}

};

int main() { MyStack myStack;

myStack.push(1);

myStack.push(2);

cout << "Top element: " << myStack.top() << endl;

cout << "Pop element: " << myStack.pop() << endl;

cout << "Stack is empty: " << (myStack.empty() ? "true" : "false") << endl;

myStack.push(3);

cout << "Top element: " << myStack.top() << endl;

cout << "Pop element: " << myStack.pop() << endl;

cout << "Stack is empty: " << (myStack.empty() ? "true" : "false") << endl;

return 0;

}