Write a program in Java to insert and remove elements in a queue

Program:

import java.util.\*;

class queue{

// Function to remove an element from

// the queue

static Queue<Integer> q;

static void remove(int t)

{

// Helper queue to store the elements

// temporarily.

Queue<Integer> ref = new LinkedList<>();

int s = q.size();

int cnt = 0;

// Finding the value to be removed

while (!q.isEmpty() && q.peek() != t) {

ref.add(q.peek());

q.remove();

cnt++;

}

// If element is not found

if (q.isEmpty()) {

System.out.print("element not found!!" +"\n");

while (!ref.isEmpty()) {

// Pushing all the elements back into q

q.add(ref.peek());

ref.remove();

}

}

// If element is found

else {

q.remove();

while (!ref.isEmpty()) {

// Pushing all the elements back into q

q.add(ref.peek());

ref.remove();

}

int k = s - cnt - 1;

while (k-- >0) {

// Pushing elements from front of q to its back

int p = q.peek();

q.remove();

q.add(p);

}

}

}

static void print()

{

Queue<Integer> qr = new LinkedList<>(q);

while (!qr.isEmpty()) {

System.out.print(qr.peek()+ " ");

qr.remove();

}

System.out.println();

}

// Driver Code

public static void main(String[] args)

{

q = new LinkedList<>();

// Pushing into the queue

q.add(10);

q.add(20);

q.add(30);

q.add(40);

q.add(50);

q.add(60);

print();

remove(39);

print();

remove(30);

print();

}

}

Output:

10 20 30 40 50 60

element not found!!

10 20 30 40 50 60

10 20 40 50 60