class Task4

{

public static class Node

{

int data;

Node next;

public Node(int data)

{

this.data = data;

this.next = null;

}

}

private static Node *rear* = null, *front* = null;

public static int dequeue() {

if (*isEmpty*()) {

System.*out*.println("Queue is underflow and cannot be dequeued.");

return -1;

}

int data = *front*.data;

*front* = *front*.next;

if (*front* == null) {

*rear* = null;

}

return data;

}

public static void enqueue(int item) {

Node newNode = new Node(item);

if (*rear* == null) {

*front* = *rear* = newNode;

return;

}

*rear*.next = newNode;

*rear* = newNode;

}

public static int peek() {

if (*isEmpty*()) {

System.*out*.println("Queue is empty. Cannot peek.");

return -1;

}

return *front*.data;

}

public static boolean isEmpty() {

return *front* == null;

}

}

public class Main

{

public static void main(String[] args) {

Task4 q = new Task4();

q.*enqueue*(1);

q.*enqueue*(2);

q.*enqueue*(3);

q.*enqueue*(4);

System.*out*.printf("Front element is %d\n", q.*peek*());

q.*dequeue*();

q.*dequeue*();

q.*dequeue*();

q.*dequeue*();

if (q.*isEmpty*()) {

System.*out*.print("Queue is empty");

} else {

System.*out*.print("Queue is not empty");

}

}