**Name: Vijay vishnu p b**

**Roll No:49**

**Batch:mca b**

**Date:29-03-2022**

**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 23**

**Aim**

Program to demonstrate the creation of queue object using the Priority Queue class.

**Procedure**

import java.util.\*;

public class PriorityQueue1{

public static void main(String[] args) {

PriorityQueue<Integer> queue= new PriorityQueue<>();

Scanner sc= new Scanner(System.in);

boolean iscontinue= true;

int choice;

while(iscontinue){

System.out.println("\nFollowing are the operations that you can perform on a PriorityQueue:\n1. Insertion.\n2. Deletion.\n3. Display the top element (peek).\n4. Exit");

System.out.print("Select your choice: ");

choice= sc.nextInt();

switch(choice){ case 1: {

System.out.print("\nEnter the element to insert: ");

queue.add(sc.nextInt());

break; }case 2: {

if(queue.size() <= 0)

System.out.println("\nCannot delete from the queue !! Queue is empty!!");

else

System.out.println("The deleted element is : "+queue.poll());

break; }

case 3: {

if(queue.size() <= 0)

System.out.println("\nCannot delete from the queue !! Queue is empty!!");

else System.out.println("The top element (peek) is : "+queue.peek());

break; }

case 4: {

iscontinue= false;

break; }

default:{ System.out.println("\nInvalid choice !! Please try again !!"

} }}

sc.close();

}}

**Output Screenshot**



