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**Batch:B**

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**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 26**

**Aim:**

 Program to demonstrate the creation of queue object using the PriorityQueue class

**Program:**

import java.util.\*;

public class PriorityQueue{

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:**



