Comparators Example :-

```
//
package com.RefVariableUSedInterface;

public class Student {
	//
	private int token;
	private String fname;
	private double cgpa;
	//
	public Student(int token ,String fname ,double cgpa){
		//
		this.token = token;
		this.fname = fname;
		this.cgpa = cgpa;
	}
	//
	public int getToken() {
		return token;
	}
	public String getFname() {
		return fname;
	}
	public double getCgpa() {
		return cgpa;
	}


}


// ---------------------------//
package com.RefVariableUSedInterface;

import java.util.Comparator;
import java.util.Iterator;
import java.util.PriorityQueue;
import java.util.Scanner;
// this will help us new admission
public class QueDemo{
	//


	public static void main(String[] args) {
		// TODO Auto-generated method stub
		//
		@SuppressWarnings("resource")
		Scanner input = new Scanner(System.in);
		//
		PriorityQueue<Student> studentQueue = new
PriorityQueue<Student>(50 , new Comparator<Student>() {

			@Override
			public int compare(Student s1, Student s2) {
				// TODO Auto-generated method stub

				if (s1.getCgpa() < s2.getCgpa())
					return 1;
				else if (s1.getCgpa() > s2.getCgpa())
					return -1;
				else {
					// same cgpa
```

```
                                    if (!s1.getFname().equals(s2.getFname()))
                                          return
s1.getFname().compareTo(s2.getFname());
                                    else {
                                          // same name
                                          return s1.getToken() - s2.getToken();
                                    }
                              }
                  }
            });
            System.out.print("Enter a number for Queue :-");
            int length = input.nextInt();
            //

            System.out.println();
            for (int i = 0; i < length; i++) {
                  //
                  System.out.println("Enter either Enter or SERVED");
                  String events = input.next();
                  //
                  if(events.equalsIgnoreCase("ENTER")){
                        // input if user press Enter
                        System.out.println("Enter name :-");
                        String name = input.next();
                        System.out.println("Enter cgpa :-");
                        double cgpa = input.nextDouble();
                        System.out.println("Enter token :-");
                        int token = input.nextInt();
                        // push data to the Queue
                        studentQueue.offer(new Student(token, name, cgpa));
                        System.out.println("item is add");

                  }else if(events.equalsIgnoreCase("SERVED")){
                        // removed the data from the Queue
                        studentQueue.poll();
                  }
            }

            // now show the result
            if(studentQueue.isEmpty()){
                  // if the Queue is empty
                  System.out.println("The Queue is Empty");
            }else{
                  // used the iterate
                  while(!studentQueue.isEmpty()) {
                 try {
                  //
                  Student student = studentQueue.poll();
                    System.out.println(student.getFname());
                 } catch (NullPointerException e) {
                    break;
                 }
                  }

            }
      }
}
```