**CODE:-**

**import java.util.\*;**

**class PriorityScheduling{**

**public static void main(String[] args) {**

**System.out.println("\*\*\* Priority Scheduling (Non Preemptive) \*\*\*");**

**System.out.print("Enter Number of Process: ");**

**Scanner sc = new Scanner(System.in);**

**int n = sc.nextInt();**

**String process[] = new String[n];**

**int arrivaltime[] = new int[n];**

**int burstTime[] = new int[n];**

**int completionTime[] = new int[n];**

**int priority[] = new int[n];**

**int totalWT = 0;**

**int totalTAT = 0;**

**double avgWT;**

**double avgTAT;**

**for (int i = 0; i < n; i++) {**

**process[i] = "P" + (i+1);**

**System.out.print("Enter Arrival Time for processor " + (i+1) + ":");**

**arrivaltime[i] = sc.nextInt();**

**System.out.print("Enter Burst Time for processor " + (i+1) + " : ");**

**burstTime[i] = sc.nextInt();**

**System.out.print("Enter Priority for " + (i+1) + " process: ");**

**priority[i] = sc.nextInt();**

**}**

**int temp;**

**String temp2;**

**for (int i = 0; i < n - 1; i++) {**

**for (int j = 0; j < n - 1; j++) {**

**if (priority[j] > priority[j + 1]) {**

**temp = priority[j];**

**priority[j] = priority[j + 1];**

**priority[j + 1] = temp;**

**temp = burstTime[j];**

**burstTime[j] = burstTime[j + 1];**

**burstTime[j + 1] = temp;**

**temp = arrivaltime[j];**

**arrivaltime[j] = arrivaltime[j + 1];**

**arrivaltime[j + 1] = temp;**

**temp2 = process[j];**

**process[j] = process[j + 1];**

**process[j + 1] = temp2;**

**}}}**

**int TAT[] = new int[n + 1];**

**int waitingTime[] = new int[n + 1];**

**completionTime[0]=burstTime[0];**

**for (int i = 0; i < n-1; i++) {**

**completionTime[i+1]=completionTime[i]+burstTime[i+1];**

**}**

**System.out.println("\*\*\* Priority Scheduling (Non Preemptive) \*\*\*");**

**System.out.println("Processor\tArrival time\tBrust time\tCompletion Time\t\tTurn around time\tWaiting time");**

**System.out.println("----------------------------------------------------------------------------------------------------------");**

**for (int i = 0; i < n; i++) {**

**TAT[i] = completionTime[i]-arrivaltime[i];**

**waitingTime[i] = TAT[i]-burstTime[i]; System.out.println(process[i]+"\t\t"+arrivaltime[i]+"ms\t\t"+burstTime[i]+"ms\t\t"+completionTime[i]+"ms\t\t\t"+TAT[i]+"ms\t\t\t"+waitingTime[i]+"ms");**

**totalTAT += (waitingTime[i] + burstTime[i]);**

**totalWT += waitingTime[i]; }**

**avgWT = totalWT / (double) n;**

**avgTAT = totalTAT / (double) n;**

**System.out.println("\nAverage Wating Time: " + avgWT);**

**System.out.println("Average Turn Around Time: " + avgTAT);**

**}**

**}**

**OUTPUT: -**

\*\*\* Priority Scheduling (Non Preemptive) \*\*\*

Enter Number of Process: 5

Enter Arrival Time for processor 1:0

Enter Burst Time for processor 1 : 3

Enter Priority for 1 process: 3

Enter Arrival Time for processor 2:1

Enter Burst Time for processor 2 : 6

Enter Priority for 2 process: 4

Enter Arrival Time for processor 3:3

Enter Burst Time for processor 3 : 1

Enter Priority for 3 process: 9

Enter Arrival Time for processor 4:2

Enter Burst Time for processor 4 : 2

Enter Priority for 4 process: 7

Enter Arrival Time for processor 5:4

Enter Burst Time for processor 5 : 4

Enter Priority for 5 process: 8

\*\*\* Priority Scheduling (Non Preemptive) \*\*\*

Processor Arrival time Brust time Completion Time Turn around time Waiting time

--------------------------------------------------------------------------------------------------------------------------------------------------

P1 0ms 3ms 3ms 3ms 0ms

P2 1ms 6ms 9ms 8ms 2ms

P4 2ms 2ms 11ms 9ms 7ms

P5 4ms 4ms 15ms 11ms 7ms

P3 3ms 1ms 16ms 13ms 12ms

Average Wating Time: 5.6

Average Turn Around Time: 8.8