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