**COED:-(Priority)**

import java.util.\*;

class Process {

int processId;

int arrivalTime;

int burstTime;

int priority;

int CT;

int waitingTime;

int turnaroundTime;

Process(int processId, int arrivalTime, int burstTime, int priority) {

this.processId = processId;

this.arrivalTime = arrivalTime;

this.burstTime = burstTime;

this.priority = priority;

this.waitingTime = 0;

this.turnaroundTime = 0;

this.CT = 0;

}

}

class priority {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter the number of processes: ");

int numProcesses = scanner.nextInt();

List<Process> processes = new ArrayList<>();

for (int i = 0; i < numProcesses; i++) {

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

int arrivalTime = scanner.nextInt();

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

int burstTime = scanner.nextInt();

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

int priority = scanner.nextInt();

System.out.println();

processes.add(new Process(i + 1, arrivalTime, burstTime, priority));

}

// Sort the processes by priority

Collections.sort(processes, Comparator.comparingInt(p -> p.arrivalTime));

int currentTime = 0;

float totalWaitingTime = 0;

float totalTurnaroundTime = 0;

System.out.println("Pid\tAT\tBT\tPT\tCT\tWT\tTAT");

for (Process process : processes)

{

if (process.arrivalTime > currentTime) {

currentTime = process.arrivalTime;

}

process.waitingTime = currentTime - process.arrivalTime;

process.turnaroundTime = process.waitingTime + process.burstTime;

process.CT=currentTime+process.burstTime;

currentTime += process.burstTime;

totalWaitingTime += process.waitingTime;

totalTurnaroundTime += process.turnaroundTime;

System.out.println(process.processId + "\t" + process.arrivalTime + "\t" + process.burstTime + "\t" + process.priority + "\t"+process.CT +"\t"+ process.waitingTime + "\t" + process.turnaroundTime);

}

float averageWaitingTime = totalWaitingTime / numProcesses;

float averageTurnaroundTime = totalTurnaroundTime / numProcesses;

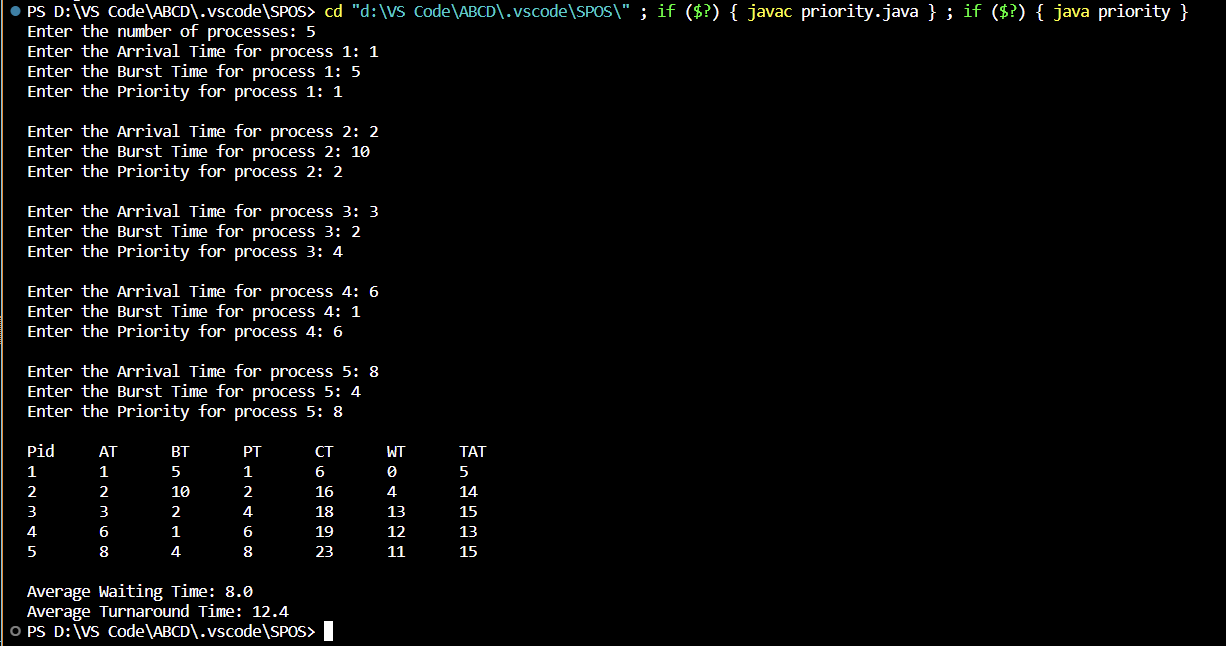
System.out.println("\nAverage Waiting Time: " + averageWaitingTime);

System.out.println("Average Turnaround Time: " + averageTurnaroundTime);

}

}

**OUTPUT:-**

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