**FCFS:**

import java.util.\*;

public class FCFS {

public static void main(String args[]) {

Scanner sc = new Scanner(System.in);

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

int n = sc.nextInt();

int pid[] = new int[n]; // process IDs

int ar[] = new int[n]; // arrival times

int bt[] = new int[n]; // burst times

int ct[] = new int[n]; // completion times

int ta[] = new int[n]; // turnaround times

int wt[] = new int[n]; // waiting times

int temp;

float avgwt = 0, avgta = 0;

// Input for arrival and burst times

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

System.out.println("Enter process " + (i + 1) + " arrival time: ");

ar[i] = sc.nextInt();

System.out.println("Enter process " + (i + 1) + " burst time: ");

bt[i] = sc.nextInt();

pid[i] = i + 1;

}

// Sorting processes based on arrival times

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

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

if (ar[j] > ar[j + 1]) {

// Swapping arrival times

temp = ar[j];

ar[j] = ar[j + 1];

ar[j + 1] = temp;

// Swapping burst times

temp = bt[j];

bt[j] = bt[j + 1];

bt[j + 1] = temp;

// Swapping process IDs

temp = pid[j];

pid[j] = pid[j + 1];

pid[j + 1] = temp;

}

}

}

// Calculating completion, turnaround, and waiting times

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

if (i == 0) {

ct[i] = ar[i] + bt[i];

} else {

if (ar[i] > ct[i - 1]) {

ct[i] = ar[i] + bt[i];

} else {

ct[i] = ct[i - 1] + bt[i];

}

}

ta[i] = ct[i] - ar[i]; // Turnaround time = completion time - arrival time

wt[i] = ta[i] - bt[i]; // Waiting time = turnaround time - burst time

avgwt += wt[i]; // Accumulating total waiting time

avgta += ta[i]; // Accumulating total turnaround time

}

// Displaying the results

System.out.println("\nPID\tArrival\tBurst\tComplete\tTurnaround\tWaiting");

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

System.out.println(pid[i] + "\t" + ar[i] + "\t" + bt[i] + "\t" + ct[i] + "\t\t" + ta[i] + "\t\t" + wt[i]);

}

sc.close();

// Displaying average waiting and turnaround times

System.out.println("\nAverage Waiting Time: " + (avgwt / n));

System.out.println("Average Turnaround Time: " + (avgta / n));

}

}