**SJF CODE**

import java.util.Scanner; public class SJF { public static void main(String args[]) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter no of process:");

int n = sc.nextInt(); int pid[] = new int[n]; int at[] = new int[n]; int bt[] = new int[n]; int ct[] = new int[n]; int ta[] = new int[n]; int wt[] = new int[n]; int f[] = new int[n]; int k[] = new int[n]; int i, st = 0, tot = 0;

float avgwt = 0, avgta = 0;

for (i = 0; i < n; i++) { pid[i] = i + 1;

System.out.print("Enter process " + (i + 1) + " arrival time:"); at[i] = sc.nextInt();

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

bt[i] = sc.nextInt(); k[i] = bt[i]; f[i] = 0;

}

while (true) { int min = 99, c = n; if (tot == n) break;

for (i = 0; i < n; i++) { if ((at[i] <= st) && (f[i] == 0) && (bt[i] < min)) {

min = bt[i]; c = i;

} } if (c == n) st++; else { bt[c]--; st++; if (bt[c] == 0) { ct[c] = st; f[c] = 1; tot++;

}

}

}

for (i = 0; i < n; i++) { ta[i] = ct[i] - at[i]; wt[i] = ta[i] - k[i]; avgwt += wt[i]; avgta += ta[i];

}

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

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

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

}

System.out.println("\nAverage turn around time :" + (float) (avgta / n)); System.out.println("Average waiting time :" + (float) (avgwt / n));

sc.close();

}

}

