**ASSIGNMENT NO.3**

**Job Scheduling Problem:-**

import java.io.\*;

import java.util.\*;

public class Main {

public static void main(String[] args)

{

Scanner input = new Scanner(System.in);

int n;

int[][] A = new int[100][4];

int total = 0;

float avg\_wt, avg\_tat;

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

n = input.nextInt();

System.out.println("Enter Burst Time:");

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

System.out.print("P" + (i + 1) + ": ");

A[i][1] = input.nextInt();

A[i][0] = i + 1;

}

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

int index = i;

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

if (A[j][1] < A[index][1]) {

index = j;

}

}

int temp = A[i][1];

A[i][1] = A[index][1];

A[index][1] = temp;

temp = A[i][0];

A[i][0] = A[index][0];

A[index][0] = temp;

}

A[0][2] = 0;

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

A[i][2] = 0;

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

A[i][2] += A[j][1];

}

total += A[i][2];

}

avg\_wt = (float)total / n;

total = 0;

System.out.println("P\tBT\tWT\tTAT");

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

A[i][3] = A[i][1] + A[i][2];

total += A[i][3];

System.out.println("P" + A[i][0] + "\t"

+ A[i][1] + "\t" + A[i][2]

+ "\t" + A[i][3]);

}

avg\_tat = (float)total / n;

System.out.println("Average Waiting Time= "

+ avg\_wt);

System.out.println("Average Turnaround Time= "

+ avg\_tat);

}

}