SJF Code

```
import java.io.*;
import java.util.*;

public class Main {
	public static void main(String[] args)
	{
		Scanner input = new Scanner(System.in);
		int n;
		// Matrix for storing Process Id, Burst
		// Time, Average Waiting Time & Average
		// Turn Around Time.
		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++) {
			// User Input Burst Time and alloting
			// Process Id.
			System.out.print("P" + (i + 1) + ": ");
			A[i][1] = input.nextInt();
			A[i][0] = i + 1;
		}
		for (int i = 0; i < n; i++) {
			// Sorting process according to their
			// Burst Time.
			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;
		// Calculation of Waiting Times
		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;
                // Calculation of Turn Around Time and printing the
                // data.
                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);
        }
}
```

Output:

Enter number of process:

5

Enter Burst Time:

P1: 6

P2: 2

P3: 8

P4: 3

P5: 4

P	BT	WT	TAT
P2	2	0	2
P4	3	2	5
P5	4	5	9
P1	6	9	15
P3	8	15	23

Average Waiting Time= 6.2

Average Turnaround Time= 10.8