Experiment - 2

Aim :- WAP to implement CPU scheduling using First Come First Serve (FCFS) algorithm.

Theory :-

FCFS :- It is a scheduling system that only sees the arrival order of each process.
Evaluates each process and then goes to the next process.

Burst Time :- The CPU time required by the process.

Waiting Time :- The time each process needs to wait before running.

Turnaround Time :- The time from the process needed from entering to finishing. It is the addition of burst time and waiting time.

Source Code :-

```cpp
#include <iostream>
using namespace std;
)
int main(){

    int n, bt[20], wt[20], tt[20];
```

```cpp
cout << "Enter the No. of Processes : ";
cin >> n;

cout << "Enter the Burst Time of Processes : ";
int w = 0, awt = 0, att = 0;

for (int i = 0; i < n; i++) {
    cin >> bt[i];
    wt[i] = w;
    w += bt[i];
    tt[i] = bt[i] + wt[i];
    awt += wt[i];
    att += tt[i];
}

cout << "\nProcess \t Burst Time \t Waiting Time \t
        Turnaround Time";
for (int i = 0; i < n; i++) {
    cout << "\n" << i+1 << "\t" << bt[i] << "\t\t"
         << wt[i] << "\t\t" << tt[i];
}
cout << "\n\nAverage Waiting Time = " << (awt/n);
cout << "\nAverage Turnaround Time = " << (att/n);
}
```

Output :-

Enter the no. of Processes : 5
Enter the Burst Time of Processes : 10 5 15 3 2

Process	Burst Time	Waiting Time	Turnaround Time
1	10	0	10
2	5	10	15
3	15	15	30
4	3	30	33
5	2	33	35

Average Waiting Time = 17
Average Turnaround Time = 24