

CODE : 3 CREATE CUP SCHEDULING FIRST COME FIRST SERVED(FCFS)

```
#include <stdio.h>
```

```
int main() {
```

```
    int n, i;
```

```
    float avgWT = 0, avgTAT = 0;
```

```
    printf("Enter number of processes: ");
```

```
    scanf("%d", &n);
```

```
    int burstTime[n], waitingTime[n], turnaroundTime[n];
```

```
    printf("Enter burst times for each process:\n");
```

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

```
        printf("P%d: ", i + 1);
```

```
        scanf("%d", &burstTime[i]);
```

```
    }
```

```
    // First process waiting time = 0
```

```
    waitingTime[0] = 0;
```

```
    // Calculate waiting time
```

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

```
        waitingTime[i] = waitingTime[i - 1] + burstTime[i - 1];
```

```

}

// Calculate turnaround time
for (i = 0; i < n; i++) {
    turnaroundTime[i] = waitingTime[i] + burstTime[i];
}

// Calculate averages
for (i = 0; i < n; i++) {
    avgWT += waitingTime[i];
    avgTAT += turnaroundTime[i];
}
avgWT /= n;
avgTAT /= n;

// Display results
printf("\nProcess\tBurst Time\tWaiting Time\tTurnaround Time\n");
for (i = 0; i < n; i++) {
    printf("P%d\t%d\t%d\t%d\n", i + 1, burstTime[i], waitingTime[i], turnaroundTime[i]);
}

printf("\nAverage Waiting Time: %.2f", avgWT);
printf("\nAverage Turnaround Time: %.2f\n", avgTAT);

return 0;
}

```