Experiment 4

```c
#include <stdio.h>

int main()
{
    int n, i, j, temp;
    int bt[10], wt[10], tat[10];
    float avg_wt = 0, avg_tat = 0;

    printf("Enter number of processes: ");
    scanf("%d", &n);

    printf("Enter burst time of each process:\n");
    for (i = 0; i < n; i++)
    {
        scanf("%d", &bt[i]);
    }

    for (i = 0; i < n - 1; i++)
    {
        for (j = i + 1; j < n; j++)
        {
            if (bt[i] > bt[j])
            {
                temp = bt[i];
                bt[i] = bt[j];
                bt[j] = temp;
            }
        }
    }

    wt[0] = 0;

    for (i = 1; i < n; i++)
    {
        wt[i] = wt[i - 1] + bt[i - 1];
    }

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

```c
for (i = 0; i < n; i++)
{
    tat[i] = wt[i] + bt[i];
    avg_wt += wt[i];
    avg_tat += tat[i];
}

printf("\nProcess\tBurst\tWaiting\tTurnaround\n");
for (i = 0; i < n; i++)
{
    printf("P%d\t%d\t%d\t%d\n", i + 1, bt[i], wt[i], tat[i]);
}

printf("\nAverage Waiting Time = %.2f\n", avg_wt / n);
printf("Average Turnaround Time = %.2f\n", avg_tat / n);

return 0;
```

```
Enter number of processes: 4
Enter burst time of each process:
6 8 7 3

Process Burst   Waiting Turnaround
P1      3       0       3
P2      6       3       9
P3      7       9       16
P4      8       16      24

Average Waiting Time = 7.00
Average Turnaround Time = 13.00

--------------------------------
Process exited after 14.85 seconds with return value 0
Press any key to continue . . .
```