3. Design a CPU scheduling program with C using First ComeFirst Served technique with the following considerations.

Program:

```
#include <stdio.h>

int main() {
   int A[100][4];
   int i, j, n, total = 0, index, temp;
   float avg_wt, avg_tat;

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

   printf("Enter Burst Time:\n");
   for (i = 0; i < n; i++) {
      printf("P%d: ", i + 1);
      scanf("%d", &A[i][1]);
      A[i][0] = i + 1;
   }

   for (i = 0; i < n; i++) {
      index = i;
      for (j = i + 1; j < n; j++) {
         if (A[j][1] < A[index][1]) {
            index = j;
         }
      }
      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 (i = 1; i < n; i++) {
      A[i][2] = 0;
      for (j = 0; j < i; j++) {
         A[i][2] += A[j][1];
      }
      total += A[i][2];
   }
   avg_wt = (float)total / n;
   total = 0;

   printf("P\tBT\tWT\tTAT\n");
   for (i = 0; i < n; i++) {
      A[i][3] = A[i][1] + A[i][2];
      total += A[i][3];
      printf("P%d\t%d\t%d\t%d\n", A[i][0], A[i][1], A[i][2], A[i][3]);
   }
   avg_tat = (float)total / n;
```

```
    printf("Average Waiting Time = %f\n", avg_wt);
    printf("Average Turnaround Time = %f\n", avg_tat);

    return 0;
}
```

Output: