/* fcfs scheduling(array) */

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

int main() {
   int i, n;  //i+1=pid as i=0
   printf("\nFCFS scheduling..\n");
   printf("Enter the number of processes: ");
   scanf("%d", &n);
   int burst_time[n]; // Array to store burst times
   int waiting_time[n]; // Array to store waiting times
   int turnaround_time[n]; // Array to store turnaround times
   int totwtime = 0, totttime = 0;

   // if (n > 10) {
   //    printf("Error: Maximum number of processes allowed is 10.\n");
   //    return 1;
   // }

   for (i = 0; i < n; i++) {
      printf("\nEnter burst time for process %d: ", i + 1);
      scanf("%d", &burst_time[i]);
   }

   // Calculate waiting time and turnaround time
   waiting_time[0] = 0;  //as it is the 1st process(no at here)
   turnaround_time[0] = burst_time[0];  //bt is always equal to tt for 1st process
   totttime = turnaround_time[0];  //total tt of 1st process=tt of 1st process

   for (i = 1; i < n; i++) {
      waiting_time[i] = waiting_time[i - 1] + burst_time[i - 1];
```

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    turnaround_time[i] = waiting_time[i] + burst_time[i];
    totwtime += waiting_time[i];
    totttime += turnaround_time[i];
  }

  printf("\nProcesses\tBurst\tWaiting\tTurnaround\n");
  for (i = 0; i < n; i++) {
    printf("%d\t\t%d\t%d\t%d\n", i + 1, burst_time[i], waiting_time[i], turnaround_time[i]);
  }

  printf("\nAverage Waiting time = %f", (float)totwtime / n);
  printf("\nAverage Turnaround time = %f\n", (float)totttime / n);

  return 0;
}
```