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1  #include <stdio.h>
2  int main() {
3      int i, NOP, sum = 0, count = 0, y, quant, wt = 0, tat = 0;
4      int at[10], bt[10], temp[10];
5      float avg_wt, avg_tat;
6      printf("Total number of processes in the system: ");
7      scanf("%d", &NOP);
8      y = NOP;
9      for (i = 0; i < NOP; i++) {
10         printf("\nEnter the Arrival and Burst time of Process[%d]\n", i + 1);
11         printf("Arrival time: ");
12         scanf("%d", &at[i]);
13         printf("Burst time: ");
14         scanf("%d", &bt[i]);
15         temp[i] = bt[i];
16     }
17     printf("Enter the Time Quantum for the process: ");
18     scanf("%d", &quant);
19     printf("\nProcess No\tBurst Time\tTAT\t\tWaiting Time");
20     for (sum = 0, i = 0; y != 0; ) {
21         if (temp[i] <= quant && temp[i] > 0) {
22             sum += temp[i];
23             temp[i] = 0;
24             count = 1;
25         } else if (temp[i] > 0) {
26             temp[i] -= quant;
27             sum += quant;
28         }

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29 if (temp[i] == 0 && count == 1) {
30     y--;
31     printf("\nProcess[%d]\t\t\t%d\t\t\t%d\t\t\t%d", i + 1, bt[i], sum - at[i], sum - at[i] - bt[i]);
32     wt += sum - at[i] - bt[i];
33     tat += sum - at[i];
34     count = 0;
35 }
36 if (i == NOP - 1) {
37     i = 0;
38 } else if (at[i + 1] <= sum) {
39     i++;
40 } else {
41     i = 0;
42 }
43 }
44 avg_wt = (float)wt / NOP;
45 avg_tat = (float)tat / NOP;
46 printf("\n\nAverage Waiting Time: %.2f", avg_wt);
47 printf("\n\nAverage Turn Around Time: %.2f\n", avg_tat);
48 return 0;
49 }
```

Total number of processes in the system: 3

Enter the Arrival and Burst time of Process[1]

Arrival time: 5

Burst time: 9

Enter the Arrival and Burst time of Process[2]

Arrival time: 4

Burst time: 6

Enter the Arrival and Burst time of Process[3]

Arrival time: 2

Burst time: 2

Enter the Time Quantum for the process: 2

Process No	Burst Time	TAT	Waiting Time
Process[3]	2	6	4
Process[2]	6	12	6
Process[1]	9	12	3

Average Waiting Time: 4.33

Average Turn Around Time: 10.00