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Q1 Source Code:

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

```
struct PCB {
```

```
    int pid, arrival, burst, turnaround;
```

```
};
```

```
void pline (int x);
```

```
void main () {
```

```
    int i, num, j;
```

```
    float avg = 0.0, sum = 0.0;
```

```
    struct PCB p[10], temp;
```

```
    printf ("Enter the total no. of Processes: ");
```

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

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

```
    {
```

```
        printf ("Enter Arrival time and Burst time  
for Process %d : \n", i+1);
```

```
        scanf ("%d %d", &p[i], arrival, &p[i], burst);
```

```
        p[i].pid = i+1;
```

```
    }
```

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```
for (i=0; i < num-1; i++)
```

```
{
```

```
for (j=0; j < num-1-i; j++)
```

```
{
```

```
if (p[j], arrival > p[j+1], arrival)
```

```
{
```

```
temp = p[j];
```

```
p[j] = p[j+1];
```

```
p[j+1] = temp;
```

```
}
```

```
}
```

```
}
```

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

```
{
```

```
sum = sum + p[i].burst;
```

```
p[i].turnaround = sum;
```

```
}
```

```
sum = 0;
```

```
printf (44);
```

```
printf ("PID \t Arrival \t Burst \t Turnaround \n");
```

```
printf (44);
```

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

```
{
```

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```
printf("%d\t%d\t%d\t%d\n", p[i].pid, p[i].  
arrival, p[i].burst, p[i].turnaround);
```

```
sum += p[i].turnaround;
```

```
}
```

```
pline(44);
```

```
avg = sum / (float) n;
```

```
printf("\n Total Turnaround Time: %.f", sum);
```

```
printf("\n Average Turnaround Time: %.3f", avg);
```

```
}
```

```
void pline(int x)
```

```
{
```

```
int i;
```

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

```
{
```

```
printf("-");
```

```
}
```

```
printf("\n");
```

```
}
```

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