PROGRAM -6

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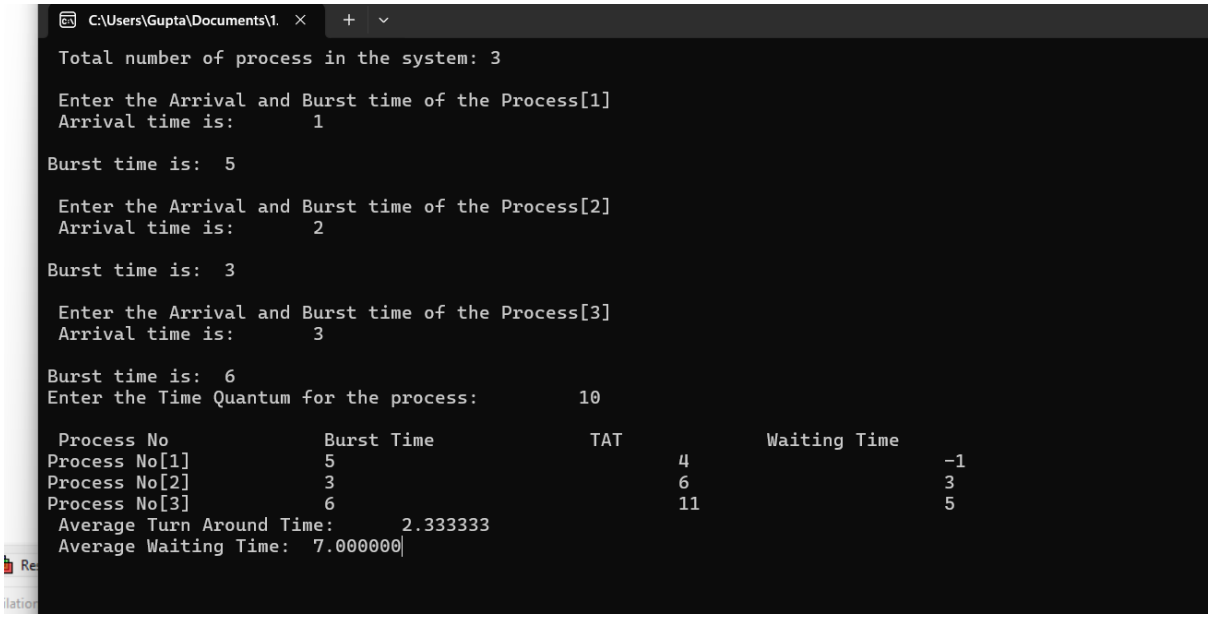
#include<stdio.h>
 #include<conio.h>
 int main()
{ int i, NOP, sum=0,count=0, y, quant, wt=0, tat=0, at[10], bt[10], temp[10];
 float avg_wt, avg_tat; printf(" Total number of process in the system: ");
 scanf("%d", &NOP); y = NOP;
for(i=0; i<NOP; i++)
{ printf("\n Enter the Arrival and Burst time of the Process[%d]\n", i+1);
 printf(" Arrival time is: \t"); scanf("%d", &at[i]);
printf(" \nBurst time is: \t"); scanf("%d", &bt[i]);
 temp[i] = bt[i];
  }
printf("Enter the Time Quantum for the process: \t");
 scanf("%d", &quant); printf("\n Process No \t\t Burst Time \t\t TAT \t\t Waiting Time ");
  for(sum=0, i = 0; y!=0; ) {
   if(temp[i] <= quant && temp[i] > 0)
{ sum = sum + temp[i];
temp[i] = 0; count=1;
 }
  else if(temp[i] > 0)
{ temp[i] = temp[i] - quant;
 sum = sum + quant;
}
if(temp[i]==0 && count==1)
{ y--;
printf("\nProcess No[%d] \t\t %d\t\t\t\t %d\t\t\t %d", i+1, bt[i], sum- at[i], sum-at[i]-bt[i]);
wt = wt+sum-at[i]-bt[i]; tat = tat+sum-at[i]; count =0;
} if(i==NOP-1)
{ i=0;
} else if(at[i+1]<=sum)
{ i++;
} else
```

```
{ i++;
} else
{ i=0;
}
} avg_wt = wt * 1.0/NOP;
 avg_tat = tat * 1.0/NOP;
printf("\n Average Turn Around Time: \t%f", avg_wt);
printf("\n Average Waiting Time: \t%f", avg_tat);
getch();
}
```

OUTPUT


C:\Users\Gupta\Documents\1.
Total number of process in the system: 3
Enter the Arrival and Burst time of the Process[1]
Arrival time is: 1
Burst time is: 5
Enter the Arrival and Burst time of the Process[2]
Arrival time is: 2
Burst time is: 3
Enter the Arrival and Burst time of the Process[3]
Arrival time is: 3
Burst time is: 6
Enter the Time Quantum for the process: 10
Process No Burst Time TAT Waiting Time
Process No[1] 5 4 -1
Process No[2] 3 6 3
Process No[3] 6 11 5
Average Turn Around Time: 2.333333
Average Waiting Time: 7.000000