Q2

```
#include <stdio.h>
main()
{ int at[10], bt[10], rt[10], endtime, i, smallest, process Gantt[100];
 int remain=0, n, time, sum_wait=0, sum_turnaround=0;
 Printf ("enter no of process:");
 scanf ("%d", &n);
 for (i=0; i<n; i++)
  { Printf ("enter arrival time for process P%d:", i+1);
   scanf ("%d", &at[i]);
   Printf ("enter burst time for process P%d:", i+1);
   scanf ("%d", &bt[i]);
   rt[i]=bt[i];
  }
Printf ("\n\n Process \t Turnaround \t waiting time\n\n");
rt[9]=9999;
 for (time=0; remain!=n; time++)
 {
  smallest=9;
  for (i=0; i<n; i++)
  {
   if (at[i]<=time && rt[i]<rt[smallest] && rt[i]>0)
   { process gantt[time]=i;
     smallest=i;
    }
```

```
rt[smallest]--;
if (rt[smallest]==0)
{ remain++;
 endtime = time+1;
 Printf("\nP[%d]\t[\t%d\t%d\t%d", smallest+1, endtime-at[smallest],
 endtime-bt[smallest]-at[smallest]);
 sum_wait+= endtime-bt[smallest]-at[smallest];
 sum_turnaround= endtime-at[smallest];
}
}
Printf("\n\n average waiting time = %f\n", sum_wait/n);
Printf("\n average turnaround time= %f\n", sum_turnaround);
for (i=0; i<=time; i++)
{ Printf("%d -> P%d", processGantt[i]+1);
}
}
```

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