4 Rounding Robin scheduling :-

```
#include <stdio.h>
int main()
int i, limit, total=0, x, counter=0;
int time_quantum;
int wait_timing=0, turnaround_time=0;
int arrival_time[10], burst_Time[10], temp[10];
float average_wating_time, average_turnar_
                                time;
printf("\n Enter total no. of processes :");
scanf("%d", &limit);
x = limit;
for(i=0; i<limit; i++)
{
printf("\n Enter Details of process [%d];", i+1);
printf("Arrival Time: t");
scanf("%d", &arrival_time[i]);
printf("Burst Time: t");
scanf("%d", &burst_time[i];
temp[i] = burst_time[i];
}
printf("\n Enter Time Quantum: t");
scanf("%d", &time_quantum);
printf("\n process ID tt Burst Time t Turnaround
                Time t waiting time \n");
```

```
for (total=0; i=0; x!=0)
{
  if(temp[i] <= time_quantum && temp[i]>0)
{
  total = total+ temp[i];
  temp[i] = 0;
  counter = 1;
}
  else if (temp[i]>0)
{
  temp[i] = temp[i] - time_quantum;
  total = total + time_quantum;
}
  if (temp[i] == 0 && counter=1)
{
      x--;
printf("\n process[%d]\t %d\t %d\t %d",
  [i+1, burst_time[i], total - arrival_time[i];
total - arrival_time - burst_time[i]);
wait_time = wait_time + total - arrival_time -
                    burst_time[i];
turnar_time = turnar_time + total_arrival_
                              time[i];
  counter = 0;
}
  if (i == limit-1)
{
    i=0;
```

```
}
else if (arrival_time[i+1] <= total):
{
    i++;
}
else
{
    i=0;
}
}
average_wait_time = wait_time * 1.0 / limit;
average_turn_time = turnar_time * 1.0 / limit;
printf("\n Average Waiting Time: %f",
                    average_wait_time);
printf("\n Average Turnaround Time: %f",
                    average_turn_time
return 0;
}
```

output: Enter Total no. of process: 4

Enter Details of process [1]

Arrival time: 0

Burst time: 4

Enter Details of process [2]

Arrival Time: 1

Burst Time: 7

Enter Details of process [3]
Arrival time : 2
Burst Time : 5

Enter Detail of process [4]
Arrival Time : 3
Burst Time : 6

~~Enter Details of process [4]~~
Enter Time quantum : 3

process Id	Burst Time	Turn around Time	waiting Time
process [1]	4	13	9
process [3]	5	16	11
process [4]	6	18	12
process [2]	7	21	14

Average waiting Time : 11.500000
Average Turnaround Time : 17.000000