**Algorithm :**

1. Take five inputs fom user and assign them as Burst Time to bt[] array.

2. Intialize wt[] and tat[] array to store waiting time and turn around time respectively.

3. Repeat steps 4 to 6 for i=0 to i<5;

4. Assign wt[]=0 for the first process. Calculate waiting time : wt[i] = bt[i-1] + wt[i-1] .

5. Calculate Turn around time : tat[i] = bt[i] + wt[i].

6. Calculate total waiting time : ttl\_wt = ttl\_wt + wt[i], total turn around time : ttl\_tat = ttl\_tat + tat[i].

7. Calculate average waiting and turn around time : ttl\_wt /5 and ttl\_tat /5.

**DESCRIPTION:-**

Round robin scheduling algorithm is used to schedule process fairly each job a time slot or quantum and the interrupting the job if it is not completed by then

the job come after the other job which are arrived in the quantum time that make these scheduling fairly.

How to compute these process requests:-

Take the process which occurs first and start executing the process.(for quantum time only)

1.Check if any other process request has arrived.

2.If a process request arrives during the quantum time in which another process is executing, then add the new process to the Ready queue

After quantum time has passed, check for any processes in Ready queue. If ready queue is empty continue current process.

3.If queue not empty and current process is not complete, then add current process to the end of the ready queue.

4.Take the first process from the Ready queue and start executing it (same rules)

5.Repeat all steps above from 2-5.

6.If process is complete and the ready queue is empty then task is complete.

After all these we get the three times which are:

1.Completion Time: the time taken for a process to complete.

2.Turn Around Time: total time the process exists in system.(completion time – arrival time).

3.Waiting Time: total time the waiting for there complete execution.(turn around time – burst time ).

**Complexity :**

1.Complexity of Calculating Waiting Time is = O(n)

2. Complexity of Calculating Turn-Around Time is = O(n)

3. Complexity of Calculating Total waiting & turn-around Time is = O(n)

4. Complexity of Calculating Average Time is = O(1)

5. Overall Complexity is = O(n)

**Constraints :**

1.Number of user inputs must equal to 5.

2.User inputs must be positive(+ve) and greater than 0.

3.Arrival Time of al the processes is zero.

4. Waiting time for the first Process must be zero.

5.Waiting time must be calculated before calculating turn around time.