```
Struct queues
{
  int priority_start;
  int priority_end;
  int total_time = 0;
  process * p;
  bool executed = false;
};
bool notcomplete (queues q[])
{
  bool a = false;
  int countInc = 0;
  for (int i = 0; i < 3; i++)
  {
    countInc = 0;
    for (int j = 0; j < q[i].length; j++)
    {
      if (q[i].P[j].burst_time != 0)
      {
        a = true;
      }
      else
      {
        countInc += 1;
      }
```

```
if (countInc == q[i].length)
{
    q[i].executed = true;
}
}
return q;
}
~~void sort_PS [queues q]~~
void sort_PS (queues q)
{
for (int i = 1; i < q.length; i++)
{
if (q.P[j].Priority < q.P[j+1].Priority)
{
    process temp = q.P[j+1];
    q.P[j+1] = q.P[j];
    q.P[j] = temp;
}
}
}
void checkcomplete Timer (queues q[])
{
bool a = notcomplete(q);
for (int i = 0; i < 3; i++)
{
```

```
if (q[i].executed == false)
{
for (int j=0; j<q[i].length; j++)
{
if (q[i].p[j].burst_time != 0)
    q[i].p[j].total_time+=1;
}
q[i].total_time+=1;
}
}
int main()
{
q[0].priority-start = 7;
q[0].priority-end = 9;
q[1].priority-start = 4;
q[1].priority-end = 6
q[2].priority-start = 1;
q[2].priority-end = 3;
int no_of_processes, priority_of_proc,
burst_time_of_process;
cout << "Enter the number of process\n";
cin >> no_of_processes;
```

```
process P1[no_of_processes];
for (int i = 0; i < no_of_processes; i++)
{
  cout << "Enter the priority of the process\n";
  cin >> priority_of_process;
  cout << "Enter the burst time of the process\n";
  cin >> burst time_of_process;
  P1[i].priority = priority_of_process;
  P1[i].burst_time = burst_time_of_
                     process;
  for (int j = 0; j < 3; j++)
  {
  cout << "Enter the priority of the process\n";
cin >> priority_of_process;
cout << "Enter the burst time of the process
                                    \n";
cin >> burst_time_of_process;
P1[i].priority = priority_of_process;
P1[i].tt_time = burst_time_of_process;
  for (int j = 0; j < 3; j++)
  {
    if (v[j].priority_start <= priority_of_
                                process &&
        priority_of_process <= v[j].
        priority_end)
```

```
        {
            q[j].length++;
        }
    }

    for (int i=0; i<3; i++)
    {
        int len = q[i].length;
        q[i].p = new Process[len];
    }

        int a = 0;
        int b = 0;
        int c = 0;

    for (int i=0; i<3; i++)
    {
    for (int j=0; j< no_of_Processes; j++
    {
    if ((q[i].priority_start <= p1[j].
                                priority
                                Priority_End))
    {
        if (i==0)
        {
            q[i].p[a++] = p1[j];
        }
```

```
else if (i==1)
{
    q[i].p[b++] = p1[j];
}
else
{
    q[i].p[c++] = p1[j];
}
}
}
a--; b--; c--;
for(int=0; i<3; i++)
{
cout<<"Queue"<<i+1<<":\t";
    for(int j=0; j<q[i].length; j++)
    {
    cout<< q[i].p[j].priority<<"->";
    }
    cout<<"Null\n";
    }
```

int timer = 0;
int 1 = -1;
int rr_time = 4;
int counter = 0;
int counterps = 0;

Q. Out Put

Enter the number of process
5
Enter priority of the process
2
Enter the burst time of the process
8
Enter the priority of the process
5
Enter the burst time for the process
6
Enter the priority of the process
8
Enter the burst time for the process
4
Enter the priority of the process
3
Enter the burst time for process
5
Enter the priority of the process
1
Enter the burst time of the process
7

6/10

tutorialspoint | Online C++ Compiler

Project | Edit | Se

Execute | Beautify | Share | Source Code | Help

```cpp
#include <iostream>
using namespace std;

struct process {
    int priority;
    int burst_time;
    int tt_time;
    int total_time = 0;
};

struct queues {
    int priority_start;
    int priority_end;
    int total_time = 0;
    int length = 0;
    process *p;
    bool executed = false;
};

bool notComplete(queues q[]) {
    bool a = false;
    int countInc = 0;
    for (int i = 0; i < 3; i++) {
        countInc = 0;
        for (int j = 0; j < q[i].length; j++) {
            if (q[i].p[j].burst_time != 0) {
                a = true;
            } else {
                countInc += 1;
            }
        }
        if (countInc == q[i].length) {
            q[i].executed = true;
```

Terminal

```
Enter the number of processes
5
Enter the priority of the process
2
Enter the burst time of the process
8
Enter the priority of the process
5
Enter the burst time of the process
6
Enter the priority of the process
8
Enter the burst time of the process
4
Enter the priority of the process
3
Enter the burst time of the process
5
Enter the priority of the process
1
Enter the burst time of the process
7
munmap_chunk(): invalid pointer
Aborted (core dumped)
```