Scheduling algorithms

1// First In First Out Algorithm (FIFO)

```
public static void update(int t)
 {
   for (int i = 0; i < Wait_Lenght; )
     if (Wait_Queue[i].arrival_time <= t) {
       Ready_Queue[Ready_Lenght++] = Wait_Queue[i];
       for (int j = i; j < Wait_Lenght - 1; j++)//shift processes after take one process to ready quue
              Wait_Queue[j] = Wait_Queue[j + 1];
      Wait_Lenght--;
    }
    else
       i++;
 }
 public static int first_come()
 {
   int first = 0;
   for (int k = 1; k < Ready_Lenght; k++)
     if (Ready_Queue[k].arrival_time < Ready_Queue[first].arrival_time)
       first = k;
      return first;
 }
 public static void FCFS()
 {
  Wait_Lenght = setprocess2018.n;
  t=0;
  int i;
  Finish_Lenght =0;
```

```
 Ready_Lenght =0;
 while(Wait_Lenght >0)
 {
  update(t) ;
  while (Ready_Lenght > 0)
  {
   i= first_come() ;
   t = t + Ready_Queue[i].execution_time;
   Ready_Queue[i].finish_time = t;
   Ready_Queue[i].wait_time = t - Ready_Queue[i].execution_time
      - Ready_Queue[i].arrival_time;
   Finish_Queue[Finish_Lenght++] = Ready_Queue[i];
   for(int j=i;j<Ready_Lenght  -1;j++)
    Ready_Queue  [j]=Ready_Queue  [j+1];
   Ready_Lenght --;
   update(t) ;
  }
  t++;
 }
}
```