**Assignment -5**

**Assignment Date: 21 August 2018**

**(1)** Initially a set of job is given with its *job\_id*, *arrival\_time* (which will be 0) and *execution\_time*. There is a single processor which can be used to execute these jobs. Each job will get a fixed amount of time (say d) to execute in the processor. Once that time duration is over then the next job will get the chance to execute and the current job, if it is not yet completed, will go to the end of the job queue. This job switching time is considered to be negligible. New jobs may also arrive after the job scheduling process is started. In that case the *arrival\_time* is assumed to be greater than 0. Once a new job arrives; it will be added to the job queue. If at any point of time, a new job arrives and also an existing job completed its ‘d’ amount of time in the processor, then first the new job will be added to the job queue and then the existing job will be added to the job queue. Perform the job scheduling and show the status of job scheduling after a certain time instant. Display each job with *job\_id, arrival\_time, execution\_time, start\_time, finish\_time, remaining\_time, status (Completed or Not completed).*

Use separate functions to perform the different functionalities. The name of the program should be **assign5.c/ assign5.cpp/ assign5.java/ …** depending on the programming language you are using. If you copy others’ program or if you allow others to copy your program then in both cases the penalty will be same.