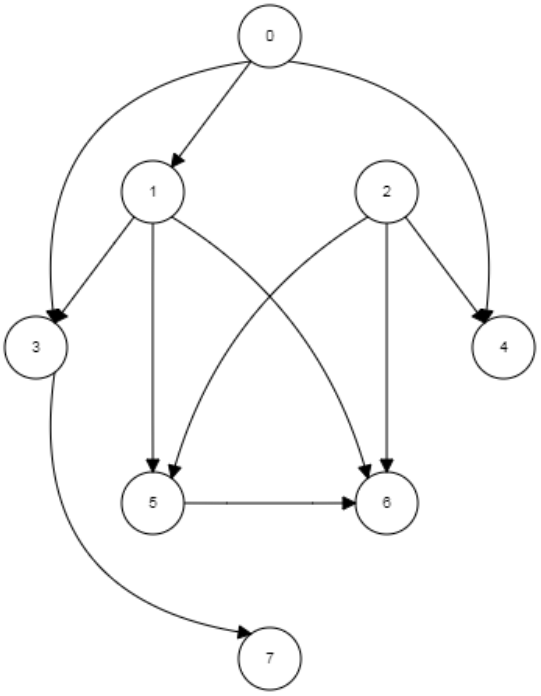
BIM306 Operating Systems

Project-2

Due: May 5, 2019

Project Definition

In the project, first, you are asked to **draw a directed graph including at least 10 nodes**. Also, your graph should be acyclic graph. Consider following graph.



Each nodes represents a job. You will create threads for each nodes (Each job is executed by a single thread in other words each thread is responsible for only one job). Jobs will executed in topological order and you need to synchronize this order using **semaphores.**

Each node should run 2 seconds. You can use `sleep(2);`

You need to send your solution in a pdf file (not code).

Also, you need to send you .c file without .zip or .rar

Example outputs:

```
Job1 is waiting for job0
Job3 is waiting for job0 and job1
Job7 is waiting for job3
Job6 is waiting for job1, job2, and job5
Job5 is waiting for job1 and job2
Job4 is waiting for job0 and job2
Job2 is done
Job0 is done
Job1 is done
Job4 is done
Job3 is done
Job5 is done
Job7 is done
Job6 is done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(program exited with code: 0)
Press return to continue
```

```
Job7 is waiting for job3
Job6 is waiting for job1, job2, and job5
Job5 is waiting for job1 and job2
Job4 is waiting for job0 and job2
Job3 is waiting for job0 and job1
Job1 is waiting for job0
Job0 is done
Job2 is done
Job4 is done
Job1 is done
Job5 is done
Job3 is done
Job7 is done
Job6 is done


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(program exited with code: 0)
Press return to continue
```