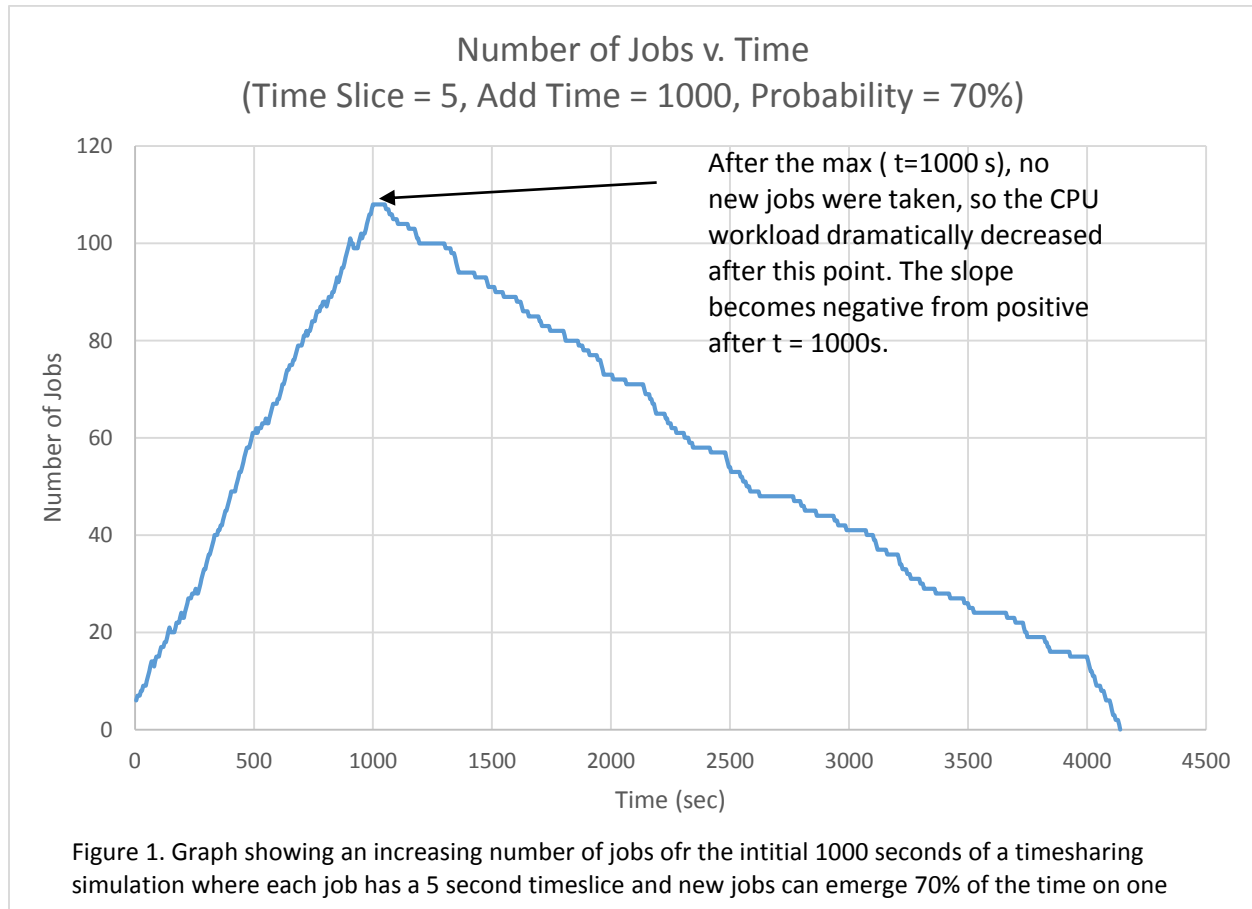


### Analysis on the Graph from simQ (a3)



As shown in Graph 1, the graph illustrates the relationship between number of jobs in CPU and time elapsed. The maximum point is at  $t = 1000s$ , before which the CPU is constantly accepting new jobs within the time and probability the user assigned. When  $t > 1000s$ , (time exceeded 1000s) CPU stopped taking any new jobs and started to only process the jobs already taken, so the slope turned negative and the graph gradually falls. Additionally, the slope before the maximum demonstrates the probability of incoming new jobs. The higher the probability, the steeper the slope. Accordingly, the slope after the maximum is closely related to the time slice assigned. The graph is almost constantly decreasing after the maximum point.