1.
   a. Explain how the advantage of multi-tasking in term of CPU utilization is shown.
      The chart below shows how the CPU is handing each process as they are ready to be handed, in specific they are allowing the execution of each process to be handed as the the inputs and outputs of the other process is handled.
   b. Explain how can we increase the CPU utilization.
      The CPU utilization can be increased by allowing the second process to be handled by the CPU first. Right now the CPU has to re-cache in between every execution however if you handle the process 2 first then there will be one less switch in the CPU as the 2nd and 3rd executions of process one will not need to recache.