Home Work #1, Due 30 Jan 2015, 11.00 am

Each program is assumed to contain a loop and each iteration of the loop is assumed to contain a CPU burst of a specified duration, followed by an IO operation. Characteristics of 3 such programs are as follows:

Program name	# iterations	CPU burst	IO operation
P_1	3	500 msec	150 msec
P_2	5	100 msec	150 msec
P_3	7	5 msec	150 msec

Q.1 Programs P_1 and P_3 are executed in a multiprogramming OS such that **program P_1 is given higher priority than program** P_3. Draw a timing diagram showing processing of the programs in the OS. You may assume that all OS overheads are negligible.

Q.2 Programs P_1, P_2, and P_3 are executed in a time-sharing system **using the time slice of 100 msec**. At the start, the program exist in the scheduling queue in the order P_1, P_2, P_3. Draw a timing diagram showing processing of the programs in the OS. You may assume that all OS overheads are negligible.