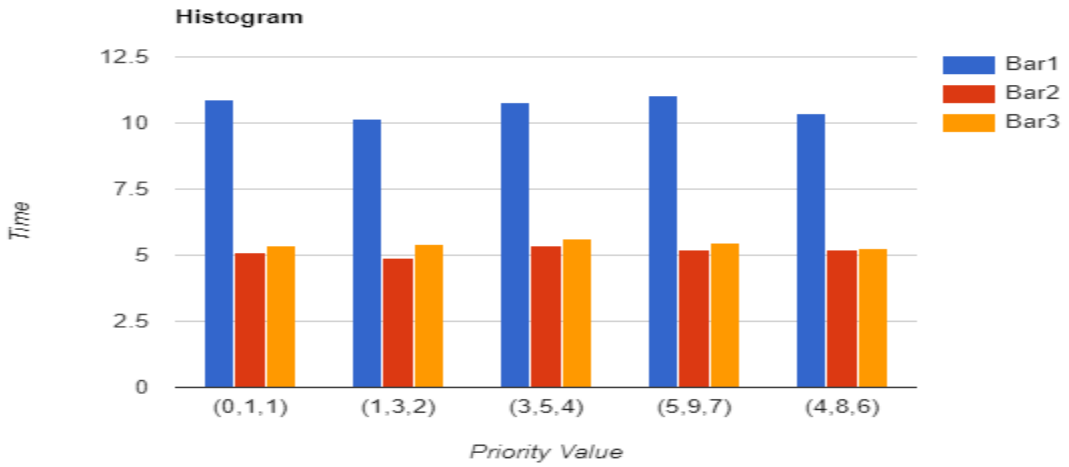
Question 1:

1.1) Three functions, namely countA, countB, countC were used, with each of them counting up until 2^32. Each of them were utilised by a thread, ThA, ThB, ThC respectively. ThA used SCHED_OTHER scheduling, ThB used SCHED_RR scheduling and ThC used SCHED_FIFO scheduling.

The time taken by these threads to complete the given task was recorded and plotted on a histogram with y-axis as time and the x-axis as priority values. The histogram is shown below:



The function used to compute these times is clock_gettime().

1.2) This part uses the same concept as above but makes use of processes instead of threads. That is, instead of creating threads we use fork() and execl() functions.

2) In this question, we have made a system call, similar to onedcopy but for two-D arrays, twodcopy. Kernel functions like _copy_from_user() and __copy_to_user() were used to read and write data.