

CS 3305A Assignment 3 FAQ:

Question 1: How can I pass two parameters from a single pipe?

Answer: You must concatenate two parameters using any delimiter e.g. space, comma etc. Similarly you have to parse them in the receiving thread using the same delimiter.

Question 2: Is it possible to pass integer argument through command line argument?

Answer: Command line argument take any type of input as string. You have to convert them into integer before performing the mathematical operation.

Question 3: Thread execution is non-deterministic in nature. How can I control the execution sequence?

Answer: Yes, thread execution is non-deterministic, but there are ways of controlling the execution order. One of the objectives of this assignment is to know whether you know the technique or not.

Question 4: Thread ID is assigned by the OS, then how can we assign our own defined thread ID (100, 101, 102 etc.)?

Answer: Thread ID used in the assignment is NOT the actual thread ID assigned by the OS, it is a simulated thread ID. See the sample code below for clarification:

```
int main(int argc, char **argv)
{
    .....
    .....
    int thread_id_1 = 100;
    pthread_create(&t1, NULL, sum, &thread_id_1);
    .....
    .....
}

void *sum(void *thread_id)
{
    .....
    .....
    int *id = (int*)thread_id;
    printf("thread (TID %d) reads X = %d and Y = %d from the pipe\n", *id, xxxxxx, xxxxxx);

    .....
    .....
}
```