**ASSINGNMENT 1**

**MESSAGE PASSING**

**DATE:28TH AUGUST,2018**

**APPROACH 2:This approach is basically based on my various searches through the internet. I would like to start this approach by explaining threads in programming. I came across a easy to understand definition that stated “*Threads are sequential flow of programming steps”.* When we run our code the CPU create threads by which our code gets run sequentially.**

**Now moving forward we get multithreading concept. This is a very good concept by which the CPU runs more than one thread at the same time sequentially. Like when one process is at a break or pause the immediate next step is run by the CPU. I came across a very nice example of multithreading : Suppose you're reading a book, and you want to take a break right now, but you want to be able to come back and resume reading from the exact point where you stopped. One way to achieve that is by jotting down the page number, line number, and word number. So your execution context for reading a book is these 3 numbers.**

**If you have a roommate, and she's using the same technique, she can take the book while you're not using it, and resume reading from where she stopped. Then you can take it back, and resume it from where you were.**

**I have provided a code for threading and multi-threading in my GitHub profile.**

**Now comes the concept of multi-processing whih mainly uses different CPU cycles for its execution. We can view the number of different processes running in our program by going to the task manager and viewing the processes option. I have uploaded a simple code for explaining multi-threading.**

**So coming to my solution of my assignment : As per my understanding I can see that under multi-processing comes a concept of queue which is an efficient way of passing messages from one process to another.**

**Though it took time to see the queuing theory I studied it a little bit.**

**So the main message passing will be done by queues.**

**I have provided a code but the code is unclear to me and I will surely look into it.**

**I gained a lot of knowledge from this assignment and hoping to work for the team in future.**

**SUBMITTED BY:**

**SUDIPTO BANERJEE**

**2ND YEAR**

**COMPUTER SCIENCE AND ENGINEERING.**