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| COMP304 Operating Systems  Assignment 2 – The Sleeping Teaching Assistant – Students and TA |
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**HOW OUR CODE WORKS**

**In main function, we initialized and created student and TA threads. Also we created semaphore named “sem” and “awroom”.**

**In TATurn function, firstly, when student comes in to TA office free seat at the outside will be increased. After student comes in, “Question solved” will be printed to screen. If no student waits for TA, TA will sleep. After sleeping, if all seats are free that means there is no student at the outside and program will print “Sleeping time” to screen so TA will go at this situation. On the other situation student will enter to office.**

**In StudentTurn function, firstly , students will look for free seats. If a seat is empty, free seat number will be decreased and student will wait for TA signal that comes from TATurn function. But here is the important point, that is when new students came, they need to wait the students who came earlier. For that, new comers will be sleep. If there is no free seats, students will wait 2 second and come back again.**

**In LateStudent function, our goal is check that all functionality worked correctly we can think this as worst case scenario.**

**Box 1 shows the output of our program:**

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| Box 1. Some Output examples |
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**Box 2 shows the another output of our program:**

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| Box 2. Some Output examples |
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