CS 4315 HW Assignment 4

1. What is the difference between deadlock prevention and deadlock avoidance? (10 points)

2. Describe how a transaction look-aside buffer (TLB) assists in the translation of a logical address to a physical address. (10 points)

3. Draw the **<u>SRTF</u>** Gantt Chart for the following processes. Make sure your chart to include the time axis that shows the starting time and the ending time of each process. (15 points)

Process	Arrival Time	CPU Burst
P1	0	9
P2	2	1
P3	2	6
P4	6	2
P5	8	2

4. If logical addresses are represented using m bits as shown below, where $m=4$ and $n=2$. Answer the following questions.

   1) What is the size of each frame in the main memory? Why? (5 points)

   2) Given the page table and the physical memory as shown on the right, what is the character in the corresponding physical address mapped from logical address 1010? Why? (10 points)