CPU Lab (7 & 8)
Homework & Report

Video Link : https://youtu.be/mdXS_qNc1Ek

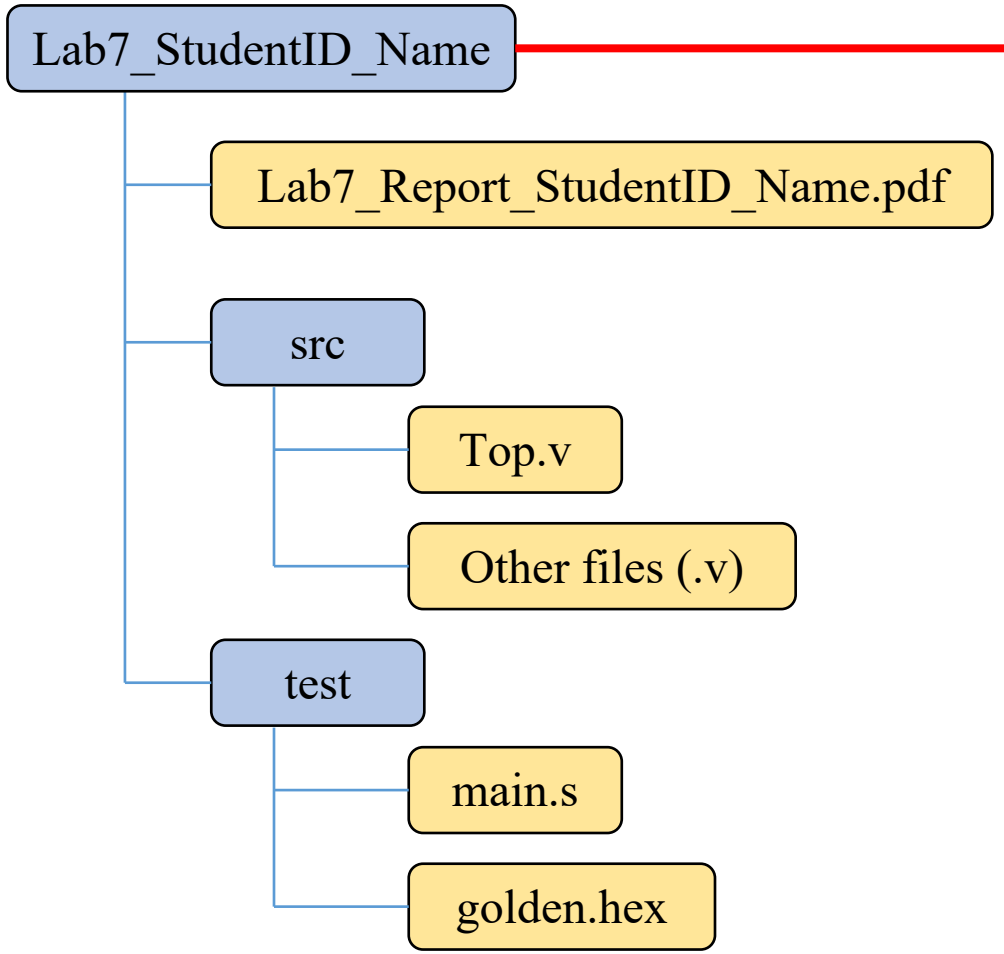
Lab7 - Homework (100%)

1. Finish a Single-Cycle CPU (you can use your own architecture or reference to TA's)
   - Pass prog0 (40 %)

2. Modify the MergeSort program you wrote in Lab3 to prog1
   - Modify main.s & golden.hex
   - If you haven't finished "MergeSort" => You can borrow the mergesort program from your classmate (If you have no friends => you can ask TA for help)
   - Pass prog1 (20 %)

3. Report (40 %)
   - **Draw** an Architecture Diagram of your Single-Cycle CPU **by yourself** (30 %)
     - **Do not copy and paste from textbook or Internet or other people**
     - Please use draw.io or powerpoint or any other painting software or ipad
     - Don't use paper & pen
   - Introduce each module (function / corner case / and so on…) (10 %)
   - Screenshot the successful result of prog0
   - Screenshot the successful result of prog1

File structure for submission



Lab8 - Homework (100%)

1. Finish a Pipeline CPU (you can use your own architecture or reference to TA's)
   - Pass prog0 (40 %)
   - Pass prog1 (10 %)

2. Report (50 %)
   - **Draw** an Architecture Diagram of your Pipeline CPU **by yourself** (30 %)
     - **Do not copy and paste from textbook or Internet or other people**
     - Please use draw.io or powerpoint or any other painting software or ipad
     - Don't use paper & pen
   - Explain why Pipeline can accelerate the CPU (10 %)
   - Describe all the hazards you encountered and how you fixed them in your Pipeline CPU (10 %)
   - Screenshot the successful result of prog0
   - Screenshot the successful result of prog1

File structure for submission