PART 6 Report by Yu Wang (903469644)

(a)  What did you learn from this project?
During this project, I learn a lot, especially in paying more attention to the detail of a CPU, how to design a simple CPU, the ability of using VHDL and the patient to debug a program. I think the forth thing is a big deal for all programmer, whatever the language is.
And during this teamwork program, I know more about teamwork. It is unnecessary for all in the team to know what the program is. Everyone has his own work, if we all finish our work well, the program can be done in high efficiency. That is very similar to programming in nowadays. Every one has his own import and export, they only need to focus their own part, no too many questions about others work, no ask others to finish its own work by the reason of I have no time.
Finally, during the project, especially for the part of running is the ED2 board. I have insight into that which the professor taught you is the essential way of a CPU. It may not fit my demand. So, I need to add/delete some parts of it for my design rather than make a mimic one. It will be better for the programming if the designer known what is needed.

(b)  What would you do differently next time?
In the next time, if I can redesign or reprogram it, I think I will pay more attention to the time compete or time conflict for the multicycle design. Because it may have different results for the simulation and running on the board. So, a good design may save so many time and I prefer thinking more rather than having no idea about why the simulation is different from the result on the board.

(c)  What is your advice to someone who is going to work on a similar project?
I:  Output is very important for a good programmer. So you need to learn how to do the simulate first, and then ran your program. And in the board, you also need to make much more outputs on the board, and to find where the problem is instead to make the output only for the demand. Because in this way you can hardly find where the problem is.
II:  You need to ask the professor for the board more early. Because the result is totally different from the simulate. If you run each part in board, you can ran get a more better result at last.
III: For people want to play with the multicycle. I hope you pay more attention to time compete. Do not do any two continuous things in one rising edge.