

Some details of Project 3

1. About the test benches

For the test benches, I will use one 32 bit instruction and 1 or 2 registers. I will use gr1 for `gr[instruction[25:21]](rs)` and gr2 for `gr[instruction[20:16]](rt)`. I think it would be more reasonable than gr1 sometimes shows rt(as my example before). It means that when you are writing sll, you should change my original gr1 to gr2.

2. Report

Some of you ask me to give you the main point of the report.

Your report should includes:

- Block diagram

In this part, explain what you have extend. For example, what registers do you use in the code? How do you finish the control part and the extension part?

- Explanation of all required instructions

For each instruction, give me your example input and output and explain that it works well. In this part, you can output the flags without explanation or just use 1 to 2 sentences to mention it. For the special operations(mult), explain the theory and why you use these registers.(Professor have shown you in the lecture and it is also like a questions to check whether you understand this content.)

- An extra explanation about flags

As the instruction, please give me explanation about each flag and compare the different flag value with different test cases arrange by yourself. Analyze the result in your report.

I think it is not necessary for me to teach you how to write a report so please finish it in your own format(maybe like the project before). Please change your report to PDF file.

3. Instructions

- For the sqrt, because MIPS does not include this instruction, I just cut it out

- For the shifting instructions, I changed it to sll, sllv, srl, srlv, sra, srav.

I have modified the instruction file. Please check that.

Tutorial time:

TUE 18:00--18:50

WED 19:00--20:50

THU 19:00--19:50

My office hour is after Thursday's tutorial. If you have any question, you can ask me at that time. I will also leave 20-30 minutes for you to ask questions. If you have questions but its not your tutorial session, you can also attend other tutorial and ask me in the Q&A time. Or you can also wait for Thursday's office hour time.

If you want to ask me many questions but do not have time on Thursday, please send me email and I will arrange a meeting on ZOOM for you if I have extra time.