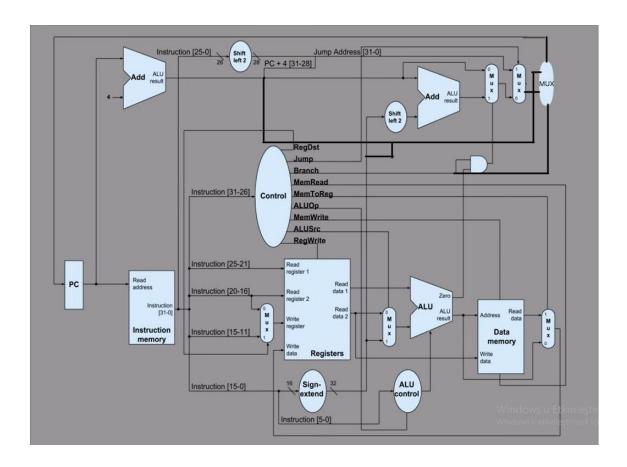
## **CENG311 Programming Assignment 3 Report**



- First, i added a mult5 for jump instruction. If instruction is jump, pc will be updated with pc+4 and shifted instruction. Otherwise pc will be updated with plus 4.
- Then i added a mult6 for ben and bvf instructions. If instruction is b type, pc will be updated with out6 according to that. Otherwise it can be updated with out5 or etc. It is like a chain. There are 3 multiplexers to connected to each other and wire comes from control unit determine process.
- I also added Cpsr register in processor. I update the cpsr there according to the instructions and results. To do this i pull cables from the alu part, comparisons happen in Alu.

- -Other than these mults and cables, I didn't add anything new to the given datapath.
- -In addition to these, I determine the type of operations in the control part according to the opcode and update the alucontrol part accordingly. In this way, instructions are performed correctly on the alu.
- -These are the results of example instructions given in assignment file.

0800000C, 00852020, 14000018, 00450827, 2081000F, 18000004, 08000040

