A picture containing text, diagram, plan, schematic

Description automatically generated

pc\_jump

acc\_in

reg\_out

a0\_to\_a1

alu\_out

acc\_out

reg\_out

reg\_out

MUX2\_A0

MUX2\_A1

MUX2\_PC

**Load immediate to ACC (YAY!)**

Imem -> IReg (#1) -> Ctrl (#2) -> ACC Write (#3)

**Load Acc to Reg**

Imem -> IReg (#1) -> Ctrl (#2) -> ACC Read (#3) -> REG Write (#4)

**Add/Sub/NOR/SHFL/SHFR**

Imem -> IReg (#1) -> Ctrl (#2) -> ACC Read (#3) -> REG Read (#4) -> ALU Calc (#5) -> ACC Write (#9)

**Jump to IMM**

Imem -> Ireg (#1) -> Ctrl (#2) ->

**Jump to Reg**

Imem -> Ireg (#1) -> Ctrl (#2) -> Reg Read (#4) -> PC Load (#5)