


Exeute

- The execution of every RISC-U instruction has a well-defined effect. It changes the state of the machine only at a specific location involving little data.
- At most two registers or one register and one memory location are modified by an instruction.
 - Every instruction modifies the **PC**.
 - Instruction which modify **data** (another register or memory location) have trivial control flow (PC to next instruction).
 - Control-flow instructions have a more sophisticated **control flow**, that is, the change the PC using relative or absolute addressing.

Execute

- Example **ADDI**:
 - semantics: 64-bit unsigned addition with wrap-around semantics
 - Bits in `$rd` are overwritten with `$rs1 + imm.`
 - `PC = PC + INSTRUCTIONSIZE.`
 - Used for initialization - loading constants into registers.

Execute

- The execution of every RISC-U instruction has a well-defined effect. It changes the state of the machine only at a specific location involving little data.
- At most two registers or one register and one memory location are modified by an instruction.
 - Every instruction modifies the **PC**.
 - Instruction which modify **data** (another register or memory location) have trivial control flow (PC to next instruction).
 - Control-flow instructions have a more sophisticated **control flow**, that is, the change the PC using relative or absolute addressing.