|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PC | Functionality | Instruction | Coding | Example |
| PC ++ | Rx = imm  Imm: [0,15] | Init Rx, imm | X 00 xx iii |  |
| PC ++ | Rx = Mem[Ry] | Load Rx, (Ry) | X 010 xx yy |  |
| PC ++ |  | Add Rx, Ry | X 011 xx yy |  |
| PC ++ |  | Sub Rx, Ry | X 100 xx yy |  |
| PC ++ |  | Slt Rx, Ry | X 101 xx yy |  |
| PC ++ |  | Or Rx, Ry | X 110 xx yy |  |
| PC ++ |  | Xor Rx, Ry | X |  |
| PC ++ |  | Shl Rx, Ry | X |  |
| PC ++ |  | Shr Rx, Ry | X |  |
| PC ++ |  | Beq Rx, Ry | X |  |
| PC ++ |  | And Rx, Ry | X 111 xx yy |  |
| PC = PC + imm |  | J | X 1111 xxx |  |
| Stop |  | End | 1 1111111 |  |

ISA Design: