```
/* //opcode define
//J type instruction
parameter
    NOP = 5'b00101, //no operation

//i type instruction
    ADDI = 5'b01000, //rd<-rd+k
    SUBI = 5'b01001, //rd<-rd-k
    ANDI = 5'b01010, //rd<-rd & k
    ORI = 5'b01011, //rd<-rd | k
    LDI = 5'b01100, //rd<-k
    LDD = 5'b01101, //rd<-[A]

//R2 type instruction
    ADD = 5'b10000, //rd <-rd+rs
    SUB = 5'b10001, //rd <- rd-rs
    AND = 5'b10010, //rd<- rd & rs
    OR = 5'b10011, //rd<- rd | rs
    EOR = 5'b10100, //rd <- rd^rs

//R1 type instruction
    NOT = 5'b11100, //rd<-!rd
    SHL = 5'b11101, //rd<- rd<<1
    SHR = 5'b11110; //rd<- rd>>1 */
```