

```

opcode: 0
Main1: PC=PC+1      000000001000001101010000001000000001
      fetch         0000000100000000000000000000000010001
      goTo(MBR)    00000000010000000000000000000000000010

```

```

opcode: 3, 0x##(number)
BIPUSH: SP = MAR = SP + 1  000000100000001101010000010010000100
      PC = PC + 1      000000101000001101010000001000000001
      fetch           0000001100000000000000000000000010001
      MDR = TOS = MBR  000000111000001101000010000100000010
      enable MDR      000001000000000000000000000000000000
      wr              000000000000000000000000000000001000000
      goto(Main1)

```

```

opcode: 9, 0x##(address)
ISTORE: PC = PC + 1      000001010000001101010000001000000001
      fetch         000001011000000000000000000000000010001
      MDR = MBR     0000011000000001101000000000100000010
      H = LV        0000011010000011010010000000000000101
      MAR = MDR + H  0000011100000001111000000000010000000
      //rd;         0000011110000000000000000000000000100000
      MDR = TOS     000001111000001101000000000100000111
      enable MDR    000010000000000000000000000000000000
      wr            000010001000000000000000000000001000000
      SP = MAR = SP - 1  000010010000001101100000010010000100
      rd            00001001100000000000000000000000100100000
      TOS = MDR;    00000000000000001101000010000000000000
      goto(Main1)

```

```

opcode: 20
F: PC = PC + 1      000010101000001101010000001000000001
      PC = PC + 1    0000000000000001101010000001000000001
      //fetch       000011000000000000000000000000000010001
      goto(Main1)

```

```

opcode: 23, 0x##(address)
ILOAD: PC = PC + 1      000011000000001101010000001000000001
      fetch         000011001000000000000000000000000010001
      MDR = MBR     000011010000001101000000000100000010
      H = LV        0000110110000011010010000000000000101
      MAR = MDR + H  000011100000001111000000000010000000
      rd            0000111010000000000000000000100100000
      MAR = SP = SP + 1  000011110000001101010000010010000100
      enable MDR    000011111000000000000000000000000000

```



