Alexander Miller

Homework 4

1.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ALUsrc | aluOp | bInvert | Branch | Jump | MemWrite | MemRead | MemToReg | RegDst | RegWrite |
| add | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| addi | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| sw | 1 | 2 | 0 | 0 | 0 | 1 | x | x | x | 0 |
| beq | 0 | 2 | 1 | 1 | 0 | 0 | x | x | x | 0 |
| sub | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| andi | 1 | 0 | 0 | 0 | 0 | 0 | x | 0 | 0 | 1 |
| j | x | x | x | x | 1 | 0 | x | x | x | 0 |
| lw | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |
| slt | 0 | 2 | 1 | 0 | 0 | 0 | x | 0 | 1 | 1 |

2G.

# include <stdio.h>

int 2G () {

int foo = 3;

char caseIsImportant[4];

caseIsImportant[0] = '\0';

caseIsImportant[1] = '\0';

caseIsImportant[2] = '\0';

caseIsImportant[3] = '\0';

int s0 = foo;

printf("%c", \*(caseIsImportant+s0) );

}

2H.

# include <stdio.h>

// s7 set somewhere external to this code

int 2H (int s7) {

int s0 = 100;

while (s0 >= s7) {

printf("%d\n",s0);

s0--;

}

}