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--;
   }
}
```