

## COMPSCI 210 A2 Marking Guide

Name the marking spreadsheet using the student's UPI.

In the feedback column of the marking spreadsheet, provide some information regarding the result of the test, e.g. "pass", "the program does not compile" etc.

The programs should be checked on login.cs.auckland.ac.nz.

The input to the programs is marked in red.

The expected output from program is marked in blue.

Unpack the marking file using command "tar xvf A2marking.tar.gz".

### Part 1

1. Unpack the student's programs using command "tar xvf A2.tar.gz".
2. Compile the program using command "gcc -o part1 part1.c".
3. Run the program as below:

```
$ ./part1 obj1
and r7,r0,r1    [5 marks for each of the opcode and operand]
add r2,r7,r6    [5 marks for each of the opcode and operand]
```

### Part 2

1. Compile the program using command "gcc -o part2 part2.c".
2. Run the program as below:

```
$ ./part2 obj2
and r7,r0,r1    [1 mark]
add r2,r7,r6    [1 mark]
and r7,r1,-16   [1 mark for "and r7,r1," 6 marks for "-16"]
add r0,r5,0     [1 mark for "add r0,r5," 6 marks for "0"]
```

### Part 3

1. Compile the program using command "gcc -o part3 part3.c".
2. Run the program as below:

```
$ ./part3 obj3
```

```
and r7,r0,r1      [1 mark]
add r2,r7,r6      [1 mark]
and r7,r1,-16     [1 mark]
jmp r0            [5 marks for "jmp", 5 marks for "r0"]
add r0,r5,0       [1 mark]
```

#### Part 4

1. Compile the program using command "gcc -o part4 part4.c".
2. Run the program as below:

```
$ ./part4 obj4 3010
and r7,r0,r1      [1 mark]
brnp 0x3016       [5 marks for "brnp", 5 marks for "0x3016"]
add r2,r7,r6      [1 mark]
and r7,r1,-16     [1 mark]
jmp r0            [1 mark]
brz 0x3010        [5 marks for "brz", 5 marks for "0x3010"]
add r0,r5,0       [1 mark]
```

**5 marks if there are no warning messages when the programs are compiled.**

Note:

1. You can give partial marks. But, please give reasons for deduction.
2. Give brief description about the result of each test case in the feedback column of the mark sheet, e.g. pass, program does not compile, etc.
3. Be generous to the students 😊