**Lab Report 4**

**Ass1**

* Set overflow default status $t0 = 0
* Add $s1 and $s2, stores in $s3
* Check $s1 and $s2 are same sign, if not then exit
* If same sign, check $s1 and $s2 are negative or not
* If negative, if $s3 < $s1 then not overflow, else overflow
* If positive, if $s3 > $s1 then not overflow, else overflow

Graphical user interface, application, table

Description automatically generated

**Ass2**

1. Code

Andi $s1, $s0, 0xff000000

Srl $s1, 24

1. Code

li $s0,0x12345678

andi $t0, $s0, 0xff

sub $s0, $s0, $t0

Graphical user interface, application, table

Description automatically generated

1. Code

li $s0, 0x12345678

andi $t0, $s0, 0xff

sub $s0, $s0, $t0

addi $s0, $s0, 0x11

Graphical user interface, application, table

Description automatically generated

1. Code

li $s0, 0x12345678

sll $s0, $s0, 31

Graphical user interface, application, table, Excel

Description automatically generated

**Ass3**

a)

addi $s0, $s1, $zero

slt $t0, $s1, 0

bne $t0, 1, Exit

sub $s0, $zero, $s1

Exit:

b)

Graphical user interface, application, table

Description automatically generated

c)

Graphical user interface, application, table

Description automatically generated

d)

Graphical user interface, application, table, Excel

Description automatically generated

**Ass4**

Graphical user interface, application, table

Description automatically generated

**Ass5**

.text

li $s0, 10 #$s0 = 10

sll $s1, $s0, 4 #$s1 = s0\*16

