

Name: **Laiba Fatima Khan**

## **CA Lab 02**

### **Task 1a:**

```
add x3, x0, x0
addi x2, x3, 32
add x4, x3, x2
addi x5, x4, -5
add x6, x2, x3
add x7, x6, x4
add x8, x7, x5
```

### **Task 1b**

```
addi x2, x0, 5
addi x3, x0, 33
addi x4, x0, 55
addi x5, x0, 6
sub x6, x2, x5
sub x7, x3, x2
add x8, x6, x7
add x9, x8, x5
sub x10, x9, x4
```

### **Task 2a**

```
addi x1, x0, 0x100
addi x2, x0, 0x1F0
sw x10, 0(x1)
sw x11, 0(x2)
```

lhu x12, 0(x1)

lh x13, 0(x2)

lb x13, 0(x2)

## **Task 2b**

addi x4, x0, 1

addi x5, x0, 2

addi x6, x0, 3

addi x7, x0, 4

### **#Task 2b(1)**

addi x1, x0, 0x100

addi x2, x0, 0x200

addi x3, x0, 0x300

sb x4, 0(x1)

sb x4, 0(x2)

lb x11, 0(x1)

lb x12, 0(x2)

add x13, x11, x12

sb x13, 0(x3)

sb x5, 1(x1)

sb x5, 1(x2)

```
lb x11, 1(x1)
lb x12, 1(x2)
add x13, x11, x12
sb x13, 1(x3)
```

```
sb x6,2(x1)
sb x6,2(x2)
```

```
lb x11, 2(x1)
lb x12, 2(x2)
add x13, x11, x12
sb x13, 2(x3)
```

```
sb x7,3(x1)
sb x7,3(x2)
```

```
lb x11, 3(x1)
lb x12, 3(x2)
add x13, x11, x12
sb x13, 3(x3)
```

### **#Task 2b(2)**

```
addi x1, x0, 0x100
addi x2, x0, 0x200
```

```
addi x3, x0, 0x300
```

```
lw x11, 0(x1)
```

```
lw x12, 0(x2)
```

```
lw x13, 0(x3)
```

```
add x13, x11, x12
```

```
sw x13, 0(x3)
```

```
lw x11, 1(x1)
```

```
lw x12, 1(x2)
```

```
lw x13, 1(x3)
```

```
add x13, x11, x12
```

```
sw x13, 1(x3)
```

```
lw x11, 2(x1)
```

```
lw x12, 2(x2)
```

```
lw x13, 2(x3)
```

```
add x13, x11, x12
```

```
sw x13, 2(x3)
```

```
lw x11, 3(x1)
```

```
lw x12, 3(x2)
```

```
lw x13, 3(x3)
```

```
add x13, x11, x12
```

```
sw x13, 3(x3)
```

### **#Task 2b(3)**

```
addi x1, x0, 0x100
```

addi x2, x0, 0x200

addi x3, x0, 0x300

sb x4,0(x1)

sh x4,0(x2)

lb x11, 0(x1)

lh x12, 0(x2)

add x13, x11, x12

sw x13, 0(x3)

sb x5,1(x1)

sh x5,2(x2)

lb x11, 1(x1)

lh x12, 2(x2)

add x14, x11, x12

sw x14, 4(x3)

sb x6,2(x1)

sh x6,4(x2)

lb x11, 2(x1)

lh x12, 4(x2)

add x15, x11, x12

sw x15, 8(x3)

sb x7, 3(x1)

sh x7, 6(x2)

lb x11, 3(x1)

lh x12, 6(x2)

add x16, x11, x12

sw x16, 12(x3)