1. a0 = 1, a1 = 2, a2 = 3

```
add a0, a0, a0
add a1, a1, a2
mul a2, a1, a0
```

1 +1 = 2-> a0

2 + 3 = 5 -> a1

5 x 2 = 10 -> a2

The value of a2 is 10.

2. a0 = 0, a1 = 3

```
    addi a0, a0, 1
      j boo
foo:
    add a0, a0, a1
      j goo
boo:
    addi a0, a0, 2
    beq a0, a1, foo
goo:
    addi a0, a0, 1
```

0 + 1 = 1 -> a0

2 + 1 =3 -> a0

3 = 3

3 + 3 = 6 -> a0

6 + 1 = 7 -> a0

The value of a0 is 7.

3. a0 = 0, a1 = 2, a2 = 0

```
    li a3, 0
loop:
    beq a1, a2, loopend
    add a3, a3, a1
    addi a1, a1, -1
    j loop
```

```
loopend:
    mv a0, a3
```

0 -> a3

2 != 0

0 + 2 = 2 -> a3

2 - 1 = 1 -> a1

J Loop

1 != 0

2 + 1 = 3 -> a3

1 - 1 = 0 -> a1

J Loop

0 = 0

3 -> a0

The value of a0 is 3. 11 instructions are executed in the snippet.