Code Explanation

Iteration 1

- Let work register be 'A'
- Initially, $R0 = 3$, $R1 = 0$, $A = 10$
- $R1 = R1 + A$
- $R1 = 0 + 10 = 10$
- $R0 = 3 - 1 = 2$
- Goto X

Iteration 2

- X:
- R1 = R1 + A
- R1 = 10 + 10 = 20
- R0 = 2-1 = 1
- Goto X

Iteration 3

- X:
- R1 = R1 + A
- R1 = 20 + 10 = 30
- R0 = 1-1 = 0
- Goto $

Multiplication

- The code function
- 10 * 3 = 30
- 30 will be in R1