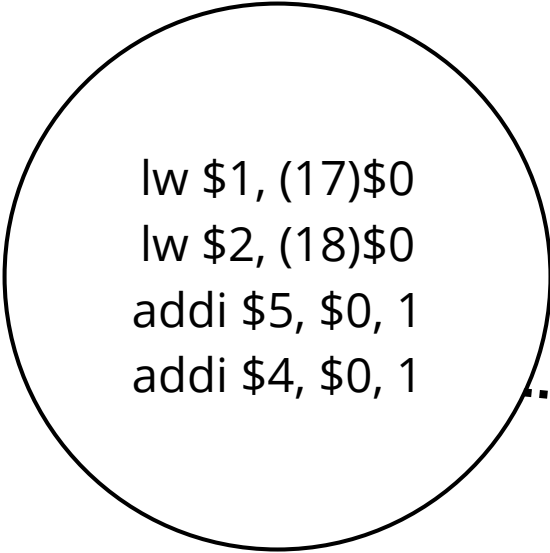
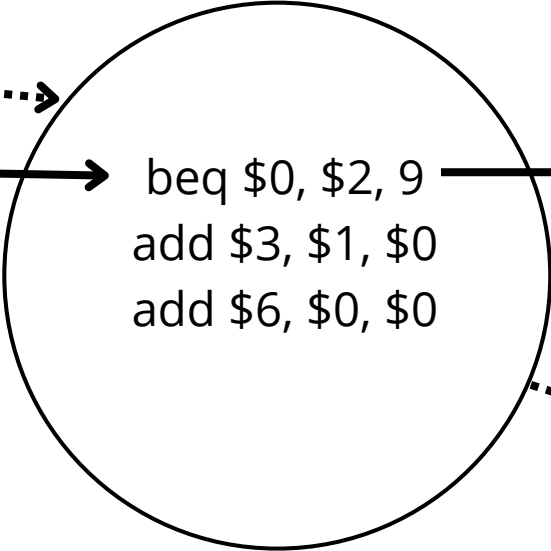


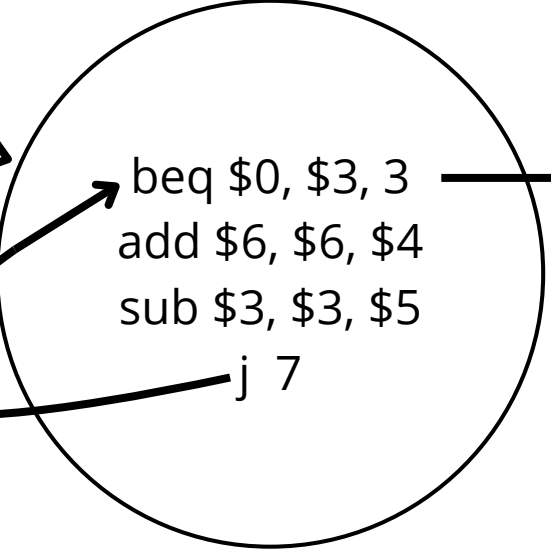
Bloco inicial



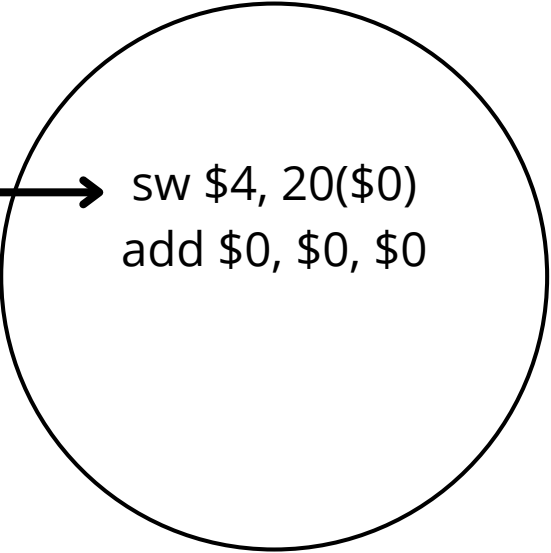
Loop potência



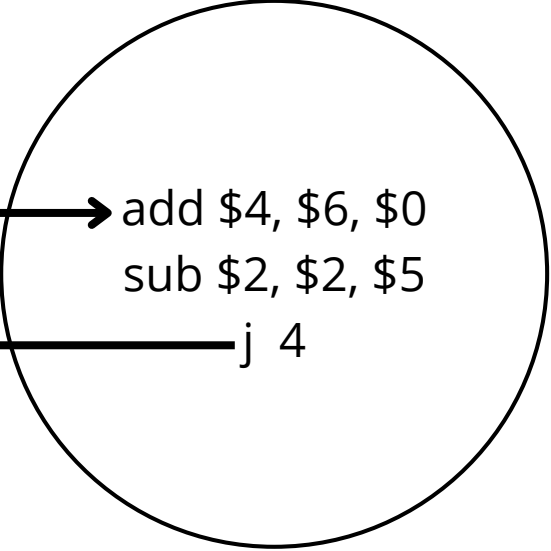
Loop multip.



Fim!



Fim multip.



```
0: lw $1, (17)$0      # $1 = Mem[17] (base)
1: lw $2, (18)$0      # $2 = Mem[18] (expoente)
2: addi $5, $0, 1     # $5 = 1 (decremento)
3: addi $4, $0, 1     # $4 = 1 (resultado inicial)
4: beq $0, $2, 9      # Se expoente == 0, pula para o fim (pc 15)
5: add $3, $1, $0     # $3 = $1 (contador para multip)
6: add $6, $0, $0     # $6 = 0 (acumulador da multip)
7: beq $0, $3, 3      # Se contador == 0, fim da multiplicação
8: add $6, $6, $4     # $6 += $4 (soma acumulativa: $4 * $1)
8: sub $3, $3, $5     # $3 -= 1 (decrementa contador)
10: j 7               # Volta para loop multip.
11: add $4, $6, $0    # $4 = $6 (atualiza resultado)
12: sub $2, $2, $5    # $2 -= 1 (decrementa expoente)
13: j 4               # Repete multiplicação com novo expoente
14: sw $4, $0, 20     # Salva resultado final em Mem[20]
15: add $0, $0, $0    # parada
```

```
***** Início da Instrução *****
->PC: [14]
->Instrução executada: [sw $4, $0, 20]
->Registradores estado antigo
== Banco de Registradores ==
$0 : 0    $1 : 4    $2 : 0    $3 : 0
$4 : 64    $5 : 1    $6 : 64    $7 : 0
=====
->Registradores estado novo
== Banco de Registradores ==
$0 : 0    $1 : 4    $2 : 0    $3 : 0
$4 : 64    $5 : 1    $6 : 64    $7 : 0
=====
***** FIM da Instrução *****
```