

## Assembly Program Execution Output

### Initial Registers:

R0:000000X0

R1:0XFFFFFFFF

R2:0X8000080

R3:0X10000001

R4:0XEFFFFFFE

### Initial Memory:

00000000:000000X0

10000001:000X1111

FFFFFFFE:0X11110000

00100001:0XFFFFFF00

00200002:0XF000000F

A:0XF000000F

0:0XFFFFFFFF

### Program Output:

### Program Execution Output

Executing: AND ['R0', 'R2']

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### Current Status Bits:

Z: 1

S: 0

C: 0

V: 0

## Assembly Program Execution Output

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No memory positions changed

---

No registers modified

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Executing: NOT ['R0']

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Current Status Bits:

Z: 0

S: 1

C: 0

V: 0

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Changed Memory State

Memory Address: 0x00000000h

Initial Value (Decimal): None

Current Value (Decimal): 4294967295

Current Value (Hexadecimal): 0xFFFFFFFF

No registers modified

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Executing: MOV ['R0', 'A']

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Current Status Bits:

Z: 0

S: 1

## Assembly Program Execution Output

**C: 0**

**V: 0**

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**No memory positions changed**

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**Changed Registers:**

**R0: 0XF00000FHex, (Decimal):4026531855**

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**Executing: SAR ['R0', 10]**

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**Current Status Bits:**

**Z: 0**

**S: 1**

**C: 0**

**V: 0**

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**No memory positions changed**

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**Changed Registers:**

**R0: 0XFFFC0000Hex, (Decimal):4294705152**

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**Executing: SUB ['R0', '[R4]']**

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**Current Status Bits:**

**Z: 0**

**S: 1**

## Assembly Program Execution Output

**C: 0**

**V: 0**

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**No memory positions changed**

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**Changed Registers:**

**R0: 0XEEEB0000Hex, (Decimal):4008378368**

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