Memory | **CPU Registers**

Step 1

```
Memory              CPU Registers
300  1 9 4 0          3 0 0  PC
301  5 9 4 1                 AC
302  2 9 4 1          1 9 4 0  IR
      .
940  0 0 0 3
941  0 0 0 2
```

Step 2

```
Memory              CPU Registers
300  1 9 4 0          3 0 1  PC
301  5 9 4 1          0 0 0 3  AC
302  2 9 4 1          1 9 4 0  IR
      .
940  0 0 0 3
941  0 0 0 2
```

Step 3

```
Memory              CPU Registers
300  1 9 4 0          3 0 1  PC
301  5 9 4 1          0 0 0 3  AC
302  2 9 4 1          5 9 4 1  IR
      .
940  0 0 0 3
941  0 0 0 2
```

Step 4

```
Memory              CPU Registers
300  1 9 4 0          3 0 2  PC
301  5 9 4 1          0 0 0 5  AC
302  2 9 4 1          5 9 4 1  IR
      .
940  0 0 0 3       3 + 2 = 5
941  0 0 0 2
```

Step 5

```
Memory              CPU Registers
300  1 9 4 0          3 0 2  PC
301  5 9 4 1          0 0 0 5  AC
302  2 9 4 1          2 9 4 1  IR
      .
940  0 0 0 3
941  0 0 0 2
```

Step 6

```
Memory              CPU Registers
300  1 9 4 0          3 0 3  PC
301  5 9 4 1          0 0 0 5  AC
302  2 9 4 1          2 9 4 1  IR
      .
940  0 0 0 3
941  0 0 0 5
```

Figure 1.4 Example of Program Execution
(contents of memory and registers in hexadecimal)