i. Expected Results vs Actual Results

Test#1: open 1000 200 100 login 100 pin 200 deposit 500 balance lock 100 balance unlock 100 logout

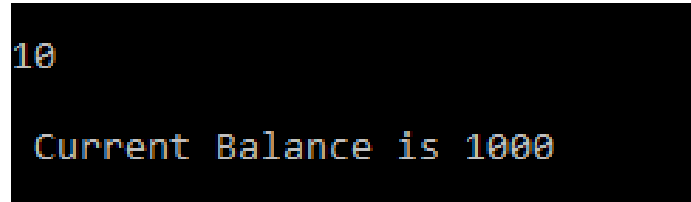- open 1000 200 100

Expected Results

Balance – 1000

State – Idle

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
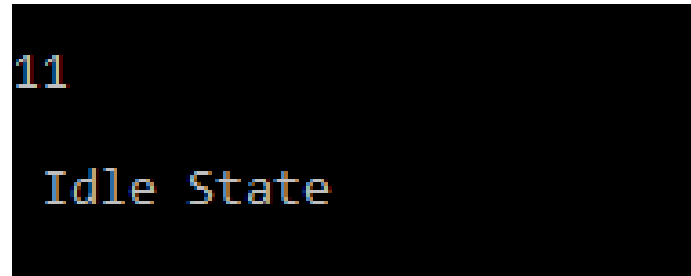
Actual Results

Balance –

```
10

Current Balance is 1000
```

State –

```
11

Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 1000

State – Pin

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1000
```

State –

```
11
 Pin State
```

Value of all Variables –

```
12
 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Expected Results

Balance – 1000

State – Ready

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 1000
```

State –

```
11
 Ready State
```

Value of all Variables –

```
12
 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- deposit 500

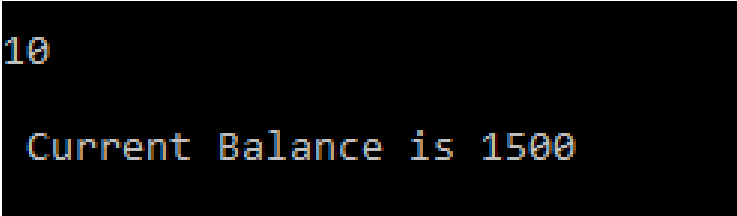**Expected Results**

Balance – 1500

State – Ready

Value of all Variables – X0 = 3, X1 = 1500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- balance

Expected Results

Balance – 1500

State – Ready

Value of all Variables – X0 = 3, X1 = 1500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

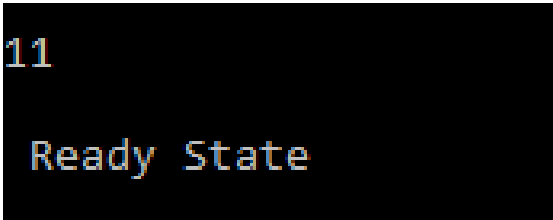## Actual Results

Balance –

```
10

 Current Balance is 1500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Expected Results

Balance – 1500

State – Locked

Value of all Variables – X0 = 3, X1 = 1500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
X0 = 3

X1 = 1500

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- balance

Expected Results

Balance – 1500

State – Locked

Value of all Variables – X0 = 3, X1 = 1500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- unlock 100

Expected Results

Balance – 1500

State – Ready

Value of all Variables – X0 = 3, X1 = 1500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```
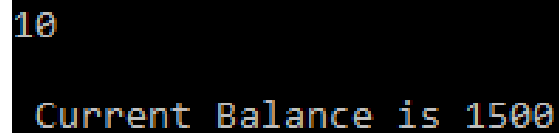
- Logout

Expected Results

Balance – 1500

State – Idle

Value of all Variables – X0 = 3, X1 = 1500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1500
```

State –

```
11

  Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#2: **open 500 200 100 login 300 login 350 login 100 pin 300 pin 350 pin 400 login 100 pin 200 deposit 500 withdraw 200 withdraw 100 balance balance withdraw 100 deposit 300 deposit 100 logout**

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 300

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

login 350

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results
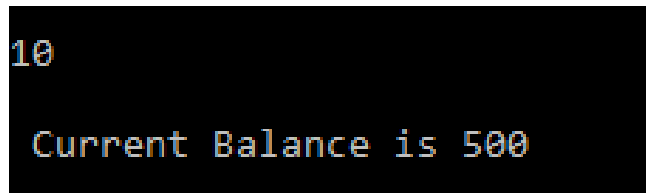
Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 300

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

Value of all Variables –

- pin 350

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 2.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 2
```

- pin 400

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 3.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 3
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```
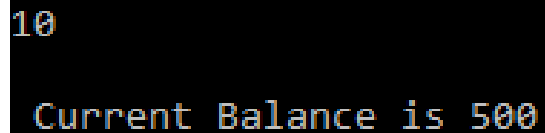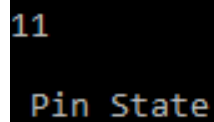
- pin 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- deposit 500

Expected Results

Balance – 1000

State – Ready

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 1000
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw 200

Expected Results

Balance – 800

State – Ready

Value of all Variables – X0 = 3, X1 = 800, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 800
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 800

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw 100

Expected Results

Balance – 700

State – Ready

Value of all Variables – X0 = 3, X1 = 700, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 700
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 700

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```
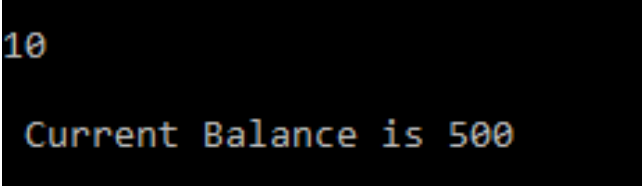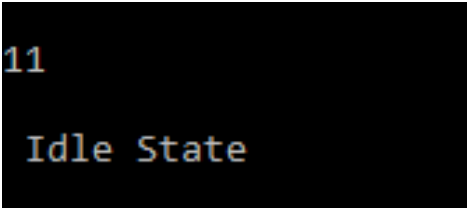
- Balance

Expected Results

Balance – 700

State – Ready

Value of all Variables – X0 = 3, X1 = 700, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 700
```

State –

```
11
 Ready State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 700
 X2 = 0
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- Balance

Expected Results

Balance – 700

State – Ready

Value of all Variables – X0 = 3, X1 = 700, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 700
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 700

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw 100

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 600
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```
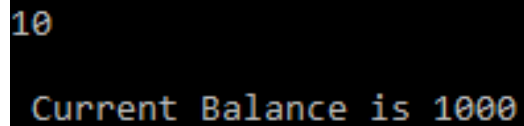
- deposit 300

Expected Results

Balance – 900

State – Ready

Value of all Variables – X0 = 3, X1 = 900, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
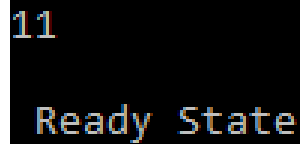
Actual Results

Balance –

```
10

Current Balance is 900
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 900

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- deposit 100

Expected Results

Balance – 1000

State – Ready

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1000
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```
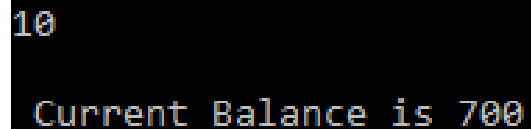
- Logout

Expected Results

Balance – 1000

State – Idle

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 1000
```

State –

```
11

Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#3: **open 400 200 100 login 100 pin 300 pin 400 pin 500 login 200 login 100 logout login 300 login 100 pin 250 pin 200 deposit 20 deposit 30 balance balance deposit 40 lock 100 balance balance unlock 100 deposit 100 lock 100 unlock 100 lock 100 unlock 100 withdraw 100 logout**

- open 400 200 100

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

Idle State
```

Value of all Variables –

```
12
 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 400
```

State –

```
11
 Pin State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 400
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```
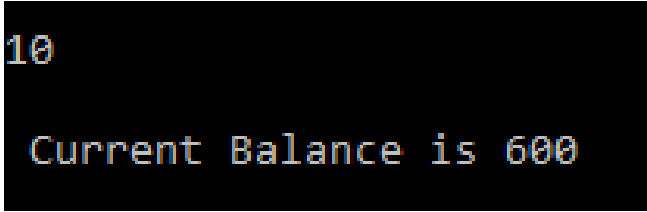
- pin 300

Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.
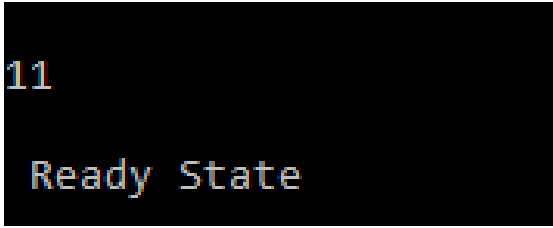
Actual Results

Balance –

```
10
Current Balance is 400
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 1
```

- pin 400

Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 2.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

X0 = 3

X1 = 400

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 2
```

- pin 500

Expected Results

Balance – 700

State – Ready

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 3.

Actual Results

Balance –

```
10
Current Balance is 400
```

State –

```
11
Idle State
```

Value of all Variables –

```
12
X0 = 3
X1 = 400
X2 = 0
X3 = 200
X4 = 0
X5 = 100
X6 = 20
X7 = 500
X8 = 0
X9 = 3
```

- login 200

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 3.

Actual Results

Balance –

```
10

 Current Balance is 400
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 3
```

- login 100
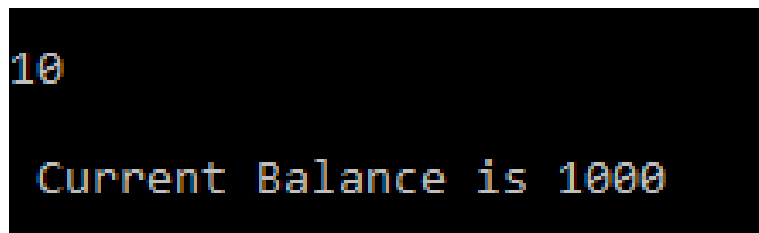
Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```
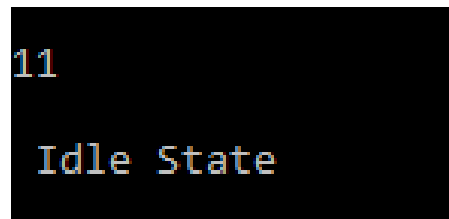
- Logout

Expected Results

Balance – 400

State – Ready

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 300

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

<u>Actual Results</u>

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 250

<u>Expected Results</u>

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

<u>Actual Results</u>

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 1
```

- pin 200

Expected Results

Balance – 400

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 1
```

- deposit 20

Expected Results

Balance – 400

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

 Current Balance is 400
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 400

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 1
```

- deposit 30

Expected Results

Balance – 410

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 410, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 410
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 410

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 1
```

- Balance

Expected Results

Balance – 410

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 410, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 410
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 410

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 1
```

- Balance

Expected Results

Balance – 410

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 410, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 410
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 410

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 1
```

- deposit 40

Expected Results

Balance – 430

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 430, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 430
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 430

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 1
```

- lock 100

Expected Results

Balance – 430

State – Locked

Value of all Variables – X0 = 3, X1 = 430, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 430
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 430

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- Balance

Expected Results

Balance – 430

State – Locked

Value of all Variables – X0 = 3, X1 = 430, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 430
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 430

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- Balance

Expected Results

Balance – 430

State – Locked

Value of all Variables – X0 = 3, X1 = 430, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 430
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 430

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- unlock 100

Expected Results

Balance – 430

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 430, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 430
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 430

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- deposit 100

Expected Results

Balance – 530

State – Ready

Value of all Variables – X0 = 3, X1 = 530, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

 Current Balance is 530
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 530

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- lock 100

Expected Results

Balance – 530

State – Locked

Value of all Variables – X0 = 3, X1 = 530, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 530
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 530

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- unlock 100

Expected Results

Balance – 530

State – Ready

Value of all Variables – X0 = 3, X1 = 530, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

 Current Balance is 530
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 530

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- lock 100

Expected Results

Balance – 530

State – Locked

Value of all Variables – X0 = 3, X1 = 530, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 530
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 530
 X2 = 1
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 100
 X9 = 1
```

- unlock 100

Expected Results

Balance – 530

State – Ready

Value of all Variables – X0 = 3, X1 = 530, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10
 Current Balance is 530
```

State –

```
11
 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 530

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- withdraw 100

Expected Results

Balance – 410

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 410, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

 Current Balance is 410
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 410

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- Logout

Expected Results

Balance – 410

State – Idle

Value of all Variables – X0 = 3, X1 = 410, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 410
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 410

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

Test#4: open 600 200 100 login 100 pin 250 logout login 100 pin 300 pin 200 deposit 100 lock 100 unlock 100 balance deposit 50 lock 100 unlock 100 withdraw 100 lock 100 unlock 100 deposit 100 withdraw 500 lock 100 unlock 100 lock 100 balance unlock 100 balance lock 100 unlock 100 deposit 100 logout login 100 logout

- open 600 200 100

Expected Results

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –


```
10

Current Balance is 600
```

State –


```
11

Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- pin 250

Expected Results

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11
 Pin State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 600
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 1
```

- Logout

Expected Results

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 1
```

- login 100

Expected Results

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 300

Expected Results

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 1
```

- pin 200

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 1
```

- deposit 100

Expected Results

Balance – 700

State – Ready

Value of all Variables – X0 = 3, X1 = 700, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.
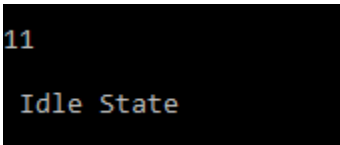
Actual Results

Balance –

```
10

Current Balance is 700
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 700

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 1
```

- lock 100

Expected Results

Balance – 700

State – Locked

Value of all Variables – X0 = 3, X1 = 700, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 700
```

State –

```
11

Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 700

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- unlock 100

Expected Results

Balance – 700

State – Ready

Value of all Variables – X0 = 3, X1 = 700, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 700
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 700

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- Balance

Expected Results

Balance – 700

State – Ready

Value of all Variables – X0 = 3, X1 = 700, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 700
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 700

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- deposit 50

Expected Results

Balance – 750

State – Ready

Value of all Variables – X0 = 3, X1 = 750, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 =100, X9 = 1.

Actual Results

Balance –

```
10

 Current Balance is 750
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 750

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- lock 100

Expected Results

Balance – 750

State – Locked

Value of all Variables – X0 = 3, X1 = 750, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 750
```

State –

```
11
 Locked State
```

Value of all Variables –

```
12
 X0 = 3

 X1 = 750

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- unlock 100

Expected Results

Balance – 750

State – Ready

Value of all Variables – X0 = 3, X1 = 750, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10
 Current Balance is 750
```

State –

```
11
 Ready State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 750
 X2 = 0
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 100
 X9 = 1
```

- withdraw 100

Expected Results

Balance – 650

State – Ready

Value of all Variables – X0 = 3, X1 = 650, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 650
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 650

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- lock 100

Expected Results

Balance – 650

State – Locked

Value of all Variables – X0 = 3, X1 = 650, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10
Current Balance is 650
```

State –

```
11
 Locked State
```

Value of all Variables –

- unlock 100

Expected Results

Balance – 650

State – Ready

Value of all Variables – X0 = 3, X1 = 650, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10
Current Balance is 650
```

State –

```
11
Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 650

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- deposit 100

Expected Results

Balance – 750

State – Ready

Value of all Variables – X0 = 3, X1 = 750, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 750
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 750

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```
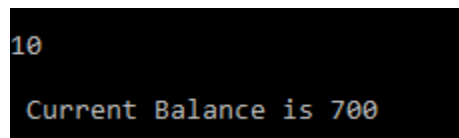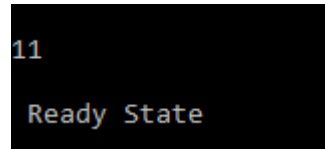
- withdraw 500

Expected Results

Balance – 230

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 230, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 230
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 230

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- lock 100

Expected Results

Balance – 230

State – Locked

Value of all Variables – X0 = 3, X1 = 230, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 230
```

State –

```
11

Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 230

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- unlock 100

Expected Results

Balance – 230

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 230, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 230
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 230

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- lock 100

Expected Results

Balance – 230

State – Locked

Value of all Variables – X0 = 3, X1 = 230, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

<u>Actual Results</u>

Balance –

```
10

Current Balance is 230
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 230

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- Balance

<u>Expected Results</u>

Balance – 230

State – Locked

Value of all Variables – X0 = 3, X1 = 230, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 230
```

State –

```
11

Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 230

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- unlock 100

Expected Results

Balance – 230

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 230, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 230
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 230

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- Balance

Expected Results

Balance – 230

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 230, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 230
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 230

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- lock 100

Expected Results

Balance – 230

State – Locked

Value of all Variables – X0 = 3, X1 = 230, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 230
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 230

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- unlock 100

Expected Results

Balance – 230

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 230, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 230
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
X0 = 3

X1 = 230

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 1
```

- deposit 100

Expected Results

Balance – 310

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 310, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –


```
10

Current Balance is 310
```

State –


```
11

Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 310

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 1
```

- Logout

Expected Results

Balance – 310

State – Idle

Value of all Variables – X0 = 3, X1 = 310, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 310
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12
X0 = 3
X1 = 310
X2 = 0
X3 = 200
X4 = 0
X5 = 100
X6 = 20
X7 = 500
X8 = 100
X9 = 1
```

- login 100

Expected Results

Balance – 310

State – Pin

Value of all Variables – X0 = 3, X1 = 310, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 310
```

State –

```
11
Pin State
```

Value of all Variables –

```
12
X0 = 3

X1 = 310

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- Logout

Expected Results

Balance – 310

State – Idle

Value of all Variables – X0 = 3, X1 = 310, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 310
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 310

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#5: **open 400 200 100 login 100 pin 200 logout login 250 login 100 pin 200 deposit 200 logout login 300 login 100 pin 200 lock 100 unlock 100 logout login 100 pin 200 balance logout**

- open 400 200 100

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

Idle State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Pin State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 400
```

State –

```
11

Overdrawn State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- logout

Expected Results

Balance – 400

State – Idle

Value of all Variables – $X0 = 3$, $X1 = 400$, $X2 = 0$, $X3 = 200$, $X4 = 0$, $X5 = 100$, $X6 = 20$, $X7 = 500$, $X8 = 0$, $X9 = 0$.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

Idle State
```

Value of all Variable –

```
12

X0 = 3

X1 = 400

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- login 250

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Idle State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 400
```

State –

```
11
 Pin State
```

Value of all Variable –

```
12
 X0 = 3
 X1 = 400
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- pin 200

Expected Results

Balance – 400

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 400
```

State –

```
11

 Overdrawn State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- deposit 200

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 600
```

State –

```
11

 Ready State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- logout

Expected Results

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Idle State
```

Value of all Variable –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- login 300

Expected Results

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Idle State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Pin State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Ready State
```

Value of all Variable –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- lock 100

Expected Results

Balance – 600

State – Locked

Value of all Variables – X0 = 3, X1 = 600, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Locked State
```

Value of all Variable –

```
12

X0 = 3

X1 = 600

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- unlock 100

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Ready State
```

Value of all Variable –

```
12
 X0 = 3
 X1 = 600
 X2 = 0
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 100
 X9 = 0
```

- logout

Expected Results

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 600
```

State –

```
11

Idle State
```

Value of all Variable –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- login 100

Expected Results

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Pin State
```

Value of all Variable –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- pin 200

Expected Results

Balance – 200

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Ready State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- balance

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –


```
10

Current Balance is 600
```

State –


```
11

Ready State
```

Value of all Variable –


```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- Logout

Expected Results

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Idle State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#6: **open 600 200 100 login 100 pin 200 logout login 100 pin 200 withdraw 50 logout login 100 pin 200 withdraw 100 deposit 100 withdraw 10 withdraw 100 balance deposit 200 withdraw 300 deposit 100 deposit 300 balance withdraw 400 balance logout**

- open 600 200 100

Expected Results

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Idle State
```

Value of all Variable –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- login 100

Expected Results

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Pin State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11
Ready State
```

Value of all Variable –

```
12
 X0 = 3
 X1 = 600
 X2 = 0
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- logout

Expected Results

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 600
```

State –

```
11
 Idle State
```

Value of all Variable –

```
12
 X0 = 3
 X1 = 600
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- login 100

Expected Results

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Pin State
```

Value of all Variable –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```
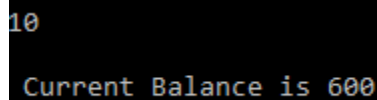
- pin 200

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
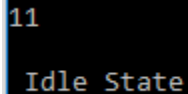
Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

Ready State
```

Value of all Variable –

```
12

X0 = 3

X1 = 600

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- withdraw 50

Expected Results

Balance – 550

State – Ready

Value of all Variables – X0 = 3, X1 = 550, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 550
```

State –

```
11

 Ready State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 550

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- logout

Expected Results

Balance – 550

State – Idle

Value of all Variables – X0 = 3, X1 = 550, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 550
```

State –

```
11

 Idle State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 550

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 550

State – Pin

Value of all Variables – X0 = 3, X1 = 550, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 550
```

State –

```
11

Pin State
```

Value of all Variable –

```
12

X0 = 3

X1 = 550

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- pin 200

Expected Results

Balance – 550

State – Ready

Value of all Variables – X0 = 3, X1 = 550, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 550
```

State –

```
11

Ready State
```

Value of all Variable –

```
12

X0 = 3

X1 = 550

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- withdraw 100

Expected Results

Balance – 430

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 430, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 430
```

State –

```
11

Overdrawn State
```

Value of all Variable –

```
12

X0 = 3

X1 = 430

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- deposit 100

Expected Results

Balance – 530

State – Ready

Value of all Variables – X0 = 3, X1 = 530, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 530
```

State –

```
11

Ready State
```

Value of all Variable –

```
12

X0 = 3

X1 = 530

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- withdraw 10

Expected Results

Balance – 520

State – Ready

Value of all Variables – $X0 = 3$, $X1 = 520$, $X2 = 0$, $X3 = 200$, $X4 = 2$, $X5 = 100$, $X6 = 20$, $X7 = 500$, $X8 = 0$, $X9 = 0$.

Actual Results

Balance –

```
10

Current Balance is 520
```

State –

```
11

Ready State
```

Value of all Variable –

```
12
 X0 = 3
 X1 = 520
 X2 = 0
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- withdraw 100

Expected Results

Balance – 400

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 400
```

State –

```
11
 Overdrawn State
```

Value of all Variable –

- balance

Expected Results

Balance – 400

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

```
11

Overdrawn State
```

Value of all Variable –

```
12

X0 = 3

X1 = 400

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- deposit 200

Expected Results

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –


```
11
 Ready State
```

Value of all Variable –


```
12
 X0 = 3
 X1 = 600
 X2 = 0
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- withdraw 300

Expected Results

Balance – 280

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 280, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 280
```

State –

```
11

Overdrawn State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 280

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- deposit 100

Expected Results

Balance – 360

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 360, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 360
```

State –

```
11

 Overdrawn State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 360

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- deposit 300

Expected Results

Balance – 660

State – Ready

Value of all Variables – X0 = 3, X1 = 660, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 660
```

State –

```
11

Ready State
```

Value of all Variable –

```
12

X0 = 3

X1 = 660

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- balance

Expected Results

Balance – 660

State – Ready

Value of all Variables – X0 = 3, X1 = 660, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 660
```

State –

```
11

Ready State
```

Value of all Variable –

```
12

X0 = 3

X1 = 660

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- withdraw 400

Expected Results

Balance – 240

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 240, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 240
```

State –

```
11

Overdrawn State
```

Value of all Variable –

```
12

X0 = 3

X1 = 240

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- Balance

Expected Results

Balance – 240

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 240, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 240
```

State –

```
11

Overdrawn State
```

Value of all Variable –

```
12

X0 = 3

X1 = 240

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- Logout

Expected Results

Balance – 240

State – Idle

Value of all Variables – X0 = 3, X1 = 240, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 240
```

State –

```
11

 Idle State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 240

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#7: **open 300 200 100 login 100 pin 200 lock 100 unlock 100 logout login 100 pin 200 balance deposit 400 deposit 200 logout**

- open 300 200 100

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 300

State – Pin

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Pin State
```

Value of all Variable –

```
12

X0 = 3

X1 = 300

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- pin 200

Expected Results

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Overdrawn State
```

Value of all Variable –

```
12

X0 = 3

X1 = 300

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- lock 100

Expected Results

Balance – 300

State – Locked

Value of all Variables – X0 = 3, X1 = 300, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Locked State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 300

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- unlock 100

Expected Results

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

 Overdrawn State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- Logout

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 300
```

State –

```
11
 Idle State
```

Value of all Variable –

```
12
 X0 = 3
 X1 = 300
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 100
 X9 = 0
```

- login 100

Expected Results

Balance – 300

State – Pin

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

State –

Value of all Variable –

- pin 200

Expected Results

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 300
```

State –

```
11
Overdrawn State
```

Value of all Variable –

```
12
X0 = 3

X1 = 300

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- Balance

Expected Results

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

State –

Value of all Variable –

- deposit 400

Expected Results

Balance – 700

State – Ready

Value of all Variables – X0 = 3, X1 = 700, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 700
```

State –

```
11

 Ready State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 700

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- deposit 200

Expected Results

Balance – 900

State – Ready

Value of all Variables – X0 = 3, X1 = 900, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 900
```

State –

```
11

Ready State
```

Value of all Variable –

```
12

X0 = 3

X1 = 900

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- Logout

Expected Results

Balance – 900

State – Idle

Value of all Variables – $X0 = 3$, $X1 = 900$, $X2 = 0$, $X3 = 200$, $X4 = 0$, $X5 = 100$, $X6 = 20$, $X7 = 500$, $X8 = 100$, $X9 = 0$.

Actual Results

Balance –


```
10

Current Balance is 900
```

State –


```
11

 Idle State
```

Value of all Variable –

```
12

 X0 = 3

 X1 = 900

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#8: open 500 200 100 open 500 200 100 logout pin 200 deposit 50 withdraw 100 balance lock 100 unlock 100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Idle State
```

Value of all variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- logout

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11
 Idle State
```

Value of all variables –

```
12
  X0 = 3
  X1 = 500
  X2 = 0
  X3 = 200
  X4 = 0
  X5 = 100
  X6 = 20
  X7 = 500
  X8 = 0
  X9 = 0
```

- pin 200

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 500
```

State –


```
11
 Idle State
```

Value of all variables –


```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```
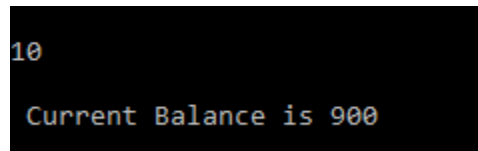
- deposit 50

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
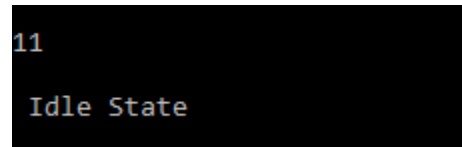
Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- balance

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- unlock 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#9: **open 500 200 100 login 100 open 500 200 100 login 100 deposit 50 withdraw 100 balance lock 100 unlock 100**

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- open 500 200 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11
 Pin State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- deposit 50

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- withdraw 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 500
```

State –

```
11
 Pin State
```

Value of all Variables –

```
12
X0 = 3
X1 = 500
X2 = 0
X3 = 200
X4 = 1
X5 = 100
X6 = 20
X7 = 500
X8 = 0
X9 = 0
```

- balance

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- unlock 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#10: open 500 200 100 login 100 pin 200 open 500 200 100 login 100 pin 200 withdraw 1000 lock 200 unlock 200

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of al Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of al Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of al Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- open 500 200 100

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of al Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Ready State
```

Value of al Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –


```
10

Current Balance is 500
```

State –


```
11

Ready State
```

Value of al Variables –


```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- withdraw 1000
- **Expected Results**

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 500
```

State –

```
11
Ready State
```

Value of al Variables –

```
12
X0 = 3
X1 = 500
X2 = 0
X3 = 200
X4 = 2
X5 = 100
X6 = 20
X7 = 500
X8 = 0
X9 = 0
```

- lock 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Ready State
```

Value of al Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- unlock 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Ready State
```

Value of al Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#11: **open 500 200 100 login 100 pin 200 lock 100 open 500 200 100 login 100 logout pin 200 deposit 50 withdraw 100 lock 100 unlock 200**

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –


```
10

Current Balance is 500
```

State –


```
11

 Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of all Variables –


```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- pin 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –


```
10
 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Expected Results

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- open 500 200 100

Expected Results

Balance – 500

State – Locked

Value of all Variables – $X0 = 3$, $X1 = 500$, $X2 = 1$, $X3 = 200$, $X4 = 2$, $X5 = 100$, $X6 = 20$, $X7 = 500$, $X8 = 100$, $X9 = 0$.

Actual Results

Balance –

```
10
Current Balance is 500
```

State –

```
11
Locked State
```

Value of all Variables –

```
12
X0 = 3
X1 = 500
X2 = 1
X3 = 200
X4 = 2
X5 = 100
X6 = 20
X7 = 500
X8 = 100
X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- logout

Expected Results

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- pin 200

Expected Results

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- deposit 50

Expected Results

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 500
```

State –

```
11
Locked State
```

Value of all Variables –

```
12
X0 = 3
X1 = 500
X2 = 1
X3 = 200
X4 = 2
X5 = 100
X6 = 20
X7 = 500
X8 = 100
X9 = 0
```

- withdraw 100

Expected Results

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- lock 100

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- unlock 200

Expected Results

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#12: **open 200 300 100 login 100 pin 300 open 200 300 100 login 100 pin 300 withdraw 50 lock 300 unlock 300**

- open 200 300 100

Expected Results

Balance – 200

State – Idle

Value of all Variables – X0 = 3, X1 = 200, X2 = 0, X3 = 300, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 200
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 200

 X2 = 0

 X3 = 300

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 200

State – Pin

Value of all Variables – X0 = 3, X1 = 200, X2 = 0, X3 = 300, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 200
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 200

 X2 = 0

 X3 = 300

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

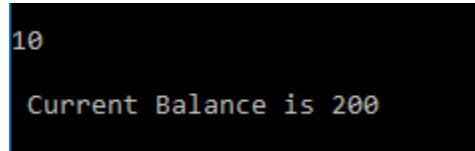- pin 300

Expected Results

Balance – 200

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 200, X2 = 0, X3 = 300, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 200
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 200

X2 = 0

X3 = 300

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- open 200 300 100

Expected Results

Balance – 200

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 200, X2 = 0, X3 = 300, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
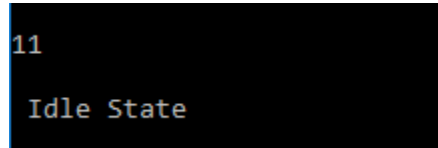
Actual Results

Balance –

```
10

Current Balance is 200
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 200

X2 = 0

X3 = 300

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- login 100

Expected Results

Balance – 200

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 200, X2 = 0, X3 = 300, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 200
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 200

 X2 = 0

 X3 = 300

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 300

Expected Results

Balance – 200

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 200, X2 = 0, X3 = 300, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 200
```

State –

```
11
 Overdrawn State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 200
 X2 = 0
 X3 = 300
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- withdraw 50

Expected Results

Balance – 200

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 300, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 200
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 200

 X2 = 0

 X3 = 300

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 300

Expected Results

Balance – 200

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 200, X2 = 0, X3 = 300, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 200
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 200

 X2 = 0

 X3 = 300

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- unlock 300

Expected Results

Balance – 200

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 200, X2 = 0, X3 = 300, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 200
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 200

 X2 = 0

 X3 = 300

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#13: **login 100 logout pin 200 deposit 150 withdraw 50 balance lock 100 unlock 100**

- login 100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```
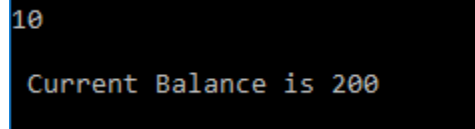
- logout

Expected Results

Balance – 0

State – Start

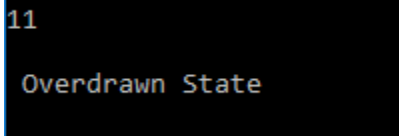Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 0
```

State –

```
11

 Start State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 0
 X2 = 0
 X3 = 0
 X4 = -1
 X5 = 0
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- pin 200

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

X0 = 3

X1 = 0

X2 = 0

X3 = 0

X4 = -1

X5 = 0

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- deposit 150

Expected Results
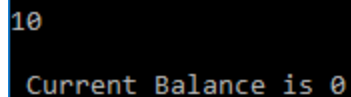
Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
11

Start State
```

State –

```
11

Start State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw 50

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
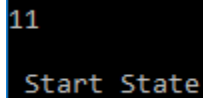
Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

X0 = 3

X1 = 0

X2 = 0

X3 = 0

X4 = -1

X5 = 0

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- balance

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

 Start State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

X0 = 3

X1 = 0

X2 = 0

X3 = 0

X4 = -1

X5 = 0

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- unlock 100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

X0 = 3

X1 = 0

X2 = 0

X3 = 0

X4 = -1

X5 = 0

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#14: open 500 200 100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#15: open 500 200 -100

- open 500 200 -100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

X0 = 3

X1 = 0

X2 = 0

X3 = 0

X4 = -1

X5 = 0

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#16: open 500 -200 -100

- open 500 -200 -100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#17: open 500 200 100

- open 500 200 100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#18: open 500 200 100 open 500 200 100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#19: open 500 200 100 open 500 200 -100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- open 500 200 -100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#20: open 500 200 100 open 500 -200 100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- open 500 -200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 500
```

State –

```
11
 Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#21: open 500 200 100 open 500 -200 -100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- open 500 -200 -100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#22: open -300 200 100

- open -300 200 100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#23: open -300 200 -100

- open -300 200 -100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#24: open -300 -200 100

- open -300 -200 100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#25: open -300 -200 -100

- open -300 -200 -100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 0
```

State –

```
11

 Start State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#26: open 300 200 100 open -300 200 100

- open 300 200 100

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 300

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- open -300 200 100

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#27: open 300 200 100 open -300 200 -100

- open 300 200 100

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- open -300 200 -100

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 300
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

Test#28: open 300 200 100 open -300 -200 100

- open 300 200 100

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- open -300 -200 100

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 300
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

Test#29: open 300 200 100 open -300 -200 -100

- open 300 200 100

Expected Results

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- open -300 -200 -100

<u>Expected Results</u>

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

<u>Actual Results</u>

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 300
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

Test#30: open 500 200 100 login 100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

Test#31: open 500 200 100 login 200

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 200

Expected Results
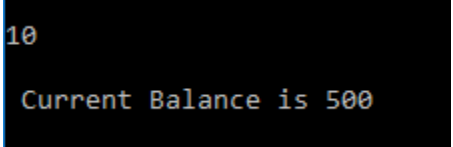
Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#32: login 100

- login 100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
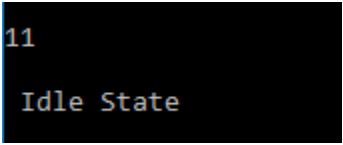
Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#33: open 400 200 100 login 100 logout

- open 400 200 100

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 400
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 400

State – Pin

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

 Balance –

```
10

 Current Balance is 400
```

State –

```
11

 Pin State
```

Value of all Variables –


```
12
 X0 = 3
 X1 = 400
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- Logout

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –


```
10
 Current Balance is 400
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#34: open 400 200 100 logout

- open 400 200 100

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 400

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- Logout

Expected Results

Balance – 400

State – Idle

Value of all Variables – X0 = 3, X1 = 400, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 400
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 400
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

Test#35: open 500 200 100 login 100 pin 200

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of all Variables –

- pin 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#36: open 500 200 100 login 100 pin 100 pin 150 pin 120 pin 100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 1.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 1
```

- pin 150

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 2.

Actual Results

 Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 2
```

- pin 120

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 3.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 3
```

- pin 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 3.

Actual Results

Balance –

```
10
 Current Balance is 500
```

State –

```
11
 Pin State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 3
```

Test#37: balance

- Balance

Expected Results
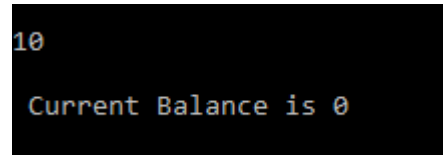
Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 0
 X2 = 0
 X3 = 0
 X4 = -1
 X5 = 0
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

Test#38: open 500 200 100 login 100 pin 200 balance

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

 Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –


```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- pin 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –


```
10
 Current Balance is 500
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- Balance

Expected Results

Balance – 500

State – Ready

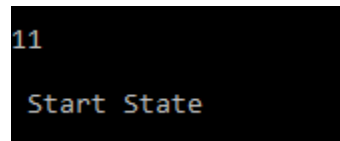Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11
 Ready State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

Test#39: open 500 200 100 login 100 pin 200 lock 100

- open 500 200 100

Expected Results

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Expected Results

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

 Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

- pin 200

Expected Results

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

```
11

Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Expected Results

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#40: lock 100

- lock 100

Expected Results

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

X0 = 3

X1 = 0

X2 = 0

X3 = 0

X4 = -1

X5 = 0

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#41: open 500 200 100 login 100 pin 200 lock 200 lock 100 lock 100

- open 500 200 100

Balance – 500

State – Idle

Value of all Variables – $X0 = 3$, $X1 = 500$, $X2 = 0$, $X3 = 200$, $X4 = 0$, $X5 = 100$, $X6 = 20$, $X7 = 500$, $X8 = 0$, $X9 = 0$.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- pin 200

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 200

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- lock 100

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#42: open 500 200 100 login 100 pin 200 lock 100 unlock 100

- open 500 200 100

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- unlock 100

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#43: unlock 100

- unlock 100

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = 0, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 0
```

State –

```
11

 Start State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#44: open 500 200 100 login 100 pin 200 lock 100 unlock 250

- open 500 200 100

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- pin 200

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- unlock 250

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

Test#45: open 500 200 100 login 100 pin 200 unlock 100

- open 500 200 100

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- unlock 100

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#46: open 300 200 100 login 100 pin 200 deposit 50

- open 300 200 100

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 300

State – Pin

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 300

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- deposit 50

Balance – 330

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 330
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

  X0 = 3

  X1 = 330

  X2 = 0

  X3 = 200

  X4 = 2

  X5 = 100

  X6 = 20

  X7 = 500

  X8 = 0

  X9 = 0
```

<u>**Test#47:**</u> **deposit 50**

- deposit 50

Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = 0, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

<u>**Actual Results**</u>

Balance –

```
10

Current Balance is 0
```

State –

```
11

Start State
```

Value of all Variables –

```
12

X0 = 3

X1 = 0

X2 = 0

X3 = 0

X4 = -1

X5 = 0

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#48: **open 300 200 100 login 100 pin 200 lock 100 deposit 50 unlock 100 deposit 500**

- open 300 200 100

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 300
 X2 = 0
 X3 = 200
 X4 = 0
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- login 100

Balance – 300

State – Pin

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

 Balance –

```
10
 Current Balance is 300
```

State –

```
11
 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

 Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Balance – 300

State – Locked

Value of all Variables – X0 = 3, X1 = 300, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 300

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- deposit 50

Balance – 300

State – Locked

Value of all Variables – X0 = 3, X1 = 300, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Locked State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 300
 X2 = 1
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 100
 X9 = 0
```

- unlock 100

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

 Balance –

```
10
Current Balance is 300
```

State –

```
11
Overdrawn State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 300
 X2 = 0
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 100
 X9 = 0
```

- deposit 500

Balance – 300

State – Ready

Value of all Variables – X0 = 3, X1 = 800, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 300
```

State –

```
11
 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 800

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#49: open 300 200 100 login 100 pin 200 deposit -50

- open 300 200 100

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 300

State – Pin

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- deposit -50

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#50: open 300 200 100 login 100 pin 200 deposit -100

- open 300 200 100

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 300

State – Pin

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

X0 = 3

X1 = 300

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- pin 200

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- deposit -100

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#51: open 300 200 100 login 100 pin 200 withdraw 50

- open 300 200 100

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 300

State – Pin

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

__Actual Results__

Balance –

```
10

 Current Balance is 300
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 300

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 300

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 300
```

State –

```
11

Overdrawn State
```

Value of all Variables –

```
12

X0 = 3

X1 = 300

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- withdraw 50

Balance – 300

State – Idle

Value of all Variables – X0 = 3, X1 = 300, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
Current Balance is 300
```

State –

```
11
Overdrawn State
```

Value of all Variables –

```
12
X0 = 3
X1 = 300
X2 = 0
X3 = 200
X4 = 2
X5 = 100
X6 = 20
X7 = 500
X8 = 0
X9 = 0
```

Test#52: open 800 200 100 login 100 pin 200 withdraw 50

- open 800 200 100

Balance – 800

State – Idle

Value of all Variables – X0 = 3, X1 = 800, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 800
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 800

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 800

State – Pin

Value of all Variables – X0 = 3, X1 = 800, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 800
```

State –

```
11

Pin State
```

Value of all Variables –

```
12

X0 = 3

X1 = 800

X2 = 0

X3 = 200

X4 = 1

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- pin 200

Balance – 800

State – Ready

Value of all Variables – X0 = 3, X1 = 800, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 800
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 800

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- withdraw 50

Balance – 750

State – Ready

Value of all Variables – X0 = 3, X1 = 750, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 750
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 750

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

Test#53: **open 600 200 100 login 100 pin 200 withdraw 120**

- open 600 200 100

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

<u>Actual Results</u>

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 600
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw 120

Balance – 460

State – Overdrawn

Value of all Variables – X0 = 3, X1 = 460, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 460
```

State –

```
11

 Overdrawn State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 460

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw 100
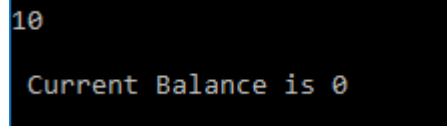
Balance – 0

State – Start

Value of all Variables – X0 = 3, X1 = 0, X2 = 0, X3 = 0, X4 = -1, X5 = 0, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

State –

Value of all Variables –

```
12

 X0 = 3

 X1 = 0

 X2 = 0

 X3 = 0

 X4 = -1

 X5 = 0

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#55: open 600 200 100 login 100 pin 200 lock 100 withdraw 50

- open 600 200 100

Balance – 600

State – Idle

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
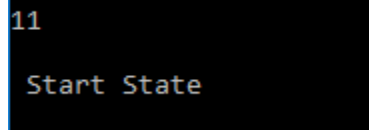
Actual Results

Balance –

```
10

 Current Balance is 600
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 600

State – Pin

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 600
```

State –

```
11
 Pin State
```

Value of all Variables –

```
12
 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 600
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- lock 100

Balance – 600

State – Locked

Value of all Variables – X0 = 3, X1 = 600, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 600
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 600

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- withdraw 50

Balance – 600

State – Ready

Value of all Variables – X0 = 3, X1 = 600, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 600
```

State –

```
11
 Locked State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 600
 X2 = 1
 X3 = 200
 X4 = 2
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 100
 X9 = 0
```

Test#56: open 500 200 100 login 100 pin 200 withdraw 1000

- open 500 200 100

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw 1000

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#57: **open 1000 200 100 login 100 pin 200 withdraw -50**

- open 1000 200 100

Balance – 1000

State – Idle

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1000
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 1000

State – Pin

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 1000
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 1000

State – Ready

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1000
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- withdraw -50

Balance – 1000

State – Ready

Value of all Variables – X0 = 3, X1 = 1000, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 1000
```

State –

```
11

 Ready State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 1000

 X2 = 0

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

Test#58: **open 500 200 100 login 100 pin 200 lock 100 unlock 100 logout unlock 100**
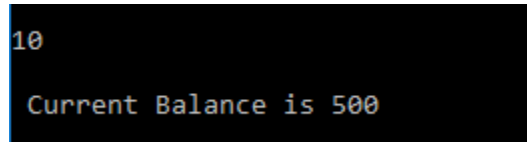
- open 500 200 100

Balance – 500

State – Idle

Value of all Variables – $X0 = 3$, $X1 = 500$, $X2 = 0$, $X3 = 200$, $X4 = 0$, $X5 = 100$, $X6 = 20$, $X7 = 500$, $X8 = 0$, $X9 = 0$.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 0

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- login 100

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.
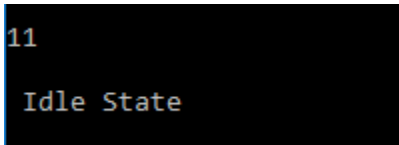
Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Pin State
```

Value of all Variables –

```
12
 X0 = 3
 X1 = 500
 X2 = 0
 X3 = 200
 X4 = 1
 X5 = 100
 X6 = 20
 X7 = 500
 X8 = 0
 X9 = 0
```

- pin 200

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10
 Current Balance is 500
```

State –

```
11
 Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- lock 100

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Locked State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 1

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- unlock 100

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 100

X9 = 0
```

- Logout

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

 Balance –

```
10

Current Balance is 500
```

State –

```
11

Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- unlock 100

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

Test#59: open 500 200 100 login 100 pin 200 lock 100 logout

- open 500 200 100

Balance – 500

State – Idle

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 0, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Idle State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 0

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- login 100

Balance – 500

State – Pin

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 1, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Pin State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 0

 X3 = 200

 X4 = 1

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 0

 X9 = 0
```

- pin 200

Balance – 500

State – Ready

Value of all Variables – X0 = 3, X1 = 500, X2 = 0, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 0, X9 = 0.

Actual Results

Balance –

```
10

Current Balance is 500
```

State –

```
11

Ready State
```

Value of all Variables –

```
12

X0 = 3

X1 = 500

X2 = 0

X3 = 200

X4 = 2

X5 = 100

X6 = 20

X7 = 500

X8 = 0

X9 = 0
```

- lock 100

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

- Logout

Balance – 500

State – Locked

Value of all Variables – X0 = 3, X1 = 500, X2 = 1, X3 = 200, X4 = 2, X5 = 100, X6 = 20, X7 = 500, X8 = 100, X9 = 0.

Actual Results

Balance –

```
10

 Current Balance is 500
```

State –

```
11

 Locked State
```

Value of all Variables –

```
12

 X0 = 3

 X1 = 500

 X2 = 1

 X3 = 200

 X4 = 2

 X5 = 100

 X6 = 20

 X7 = 500

 X8 = 100

 X9 = 0
```

As for each test case, account class produced correct results (i.e. all the Expected Result Matched with Actual results) all the test cases have successfully <u>Passed.</u>