```
1 C:\Users\kautu\AppData\Local\Programs\AdoptOpenJDK\
  bin\java.exe "-javaagent:C:\Program Files\JetBrains\
  IntelliJ IDEA Community Edition 2020.2\lib\idea_rt.
  jar=60728:C:\Program Files\JetBrains\IntelliJ IDEA
  Community Edition 2020.2\bin" -Dfile.encoding=UTF-8 -
  classpath D:\this\CA\a1\myjava\out\production\myjava
  Test
2
3 Memory before operations...
4 Line 0: 00000001000000001010000011000000000110
5 Line 1: 00001110000000000110000000100000000101
6 Line 2: 0000010100000000011000100001000000000111
7 Line 3: 1111111100000000000000100001000000000111
12
13 IBR is empty
14 Address of PC = 000000000000
15 Address of MAR = 000000000000
16 Address of MBR =
  000000010000000001010000011000000000110
17 Address of IBR = 00000110000000000110
18 Address of IR = 00000001
19 Address of MAR = 000000000101
20 PC incremented to 000000000001 (1)
21 The instruction is 00000001
22 LOAD MX: AC <-- M[X]
23 Contents of AC before op = empty
24 Contents of AC after op =
  25 IBR is not empty
26 \text{ Address of IR} = 00000110
27 Address of MAR = 000000000110
28 The instruction is 00000110
29 SUB M[X]
30 Contents of M[X] =
  31 Contents of AC before op =
  32 Contents of AC after op =
  33 IBR is empty
```

```
34 Address of PC = 000000000001
35 Address of MAR = 000000000001
36 Address of MBR =
 37 Address of IBR = 00000001000000000101
38 Address of IR = 00001110
39 Address of MAR = 000000000011
40 PC incremented to 000000000010 (2)
41 The instruction is 00001110
42 JUMP M(X, 20:39)
43 PC changed to 000000000100 (4)
44 IBR is not empty
45 Address of IR = 00100001
46 Address of MAR = 000000000111
47 The instruction is 00100001
48 STOR MX: M[X] <-- AC
49 Contents of AC =
 50 Contents of M[X] before op =
 51 Contents of M[X] after op =
 52 IBR is empty
53 Address of PC = 000000000100
54 Address of MAR = 000000000100
55 Address of MBR =
 56 Address of IBR = 000000000000000000000
57 Address of IR = 11111111
58 Address of MAR = 000000000000
59 PC incremented to 000000000101 (5)
60 The instruction is 11111111
61 Halting now, bye!
62
63 Memory after operations...
66 Line 2: 000001010000000011000100001000000000111
72
```

73	Process	finished	with	exit	code	0
74						