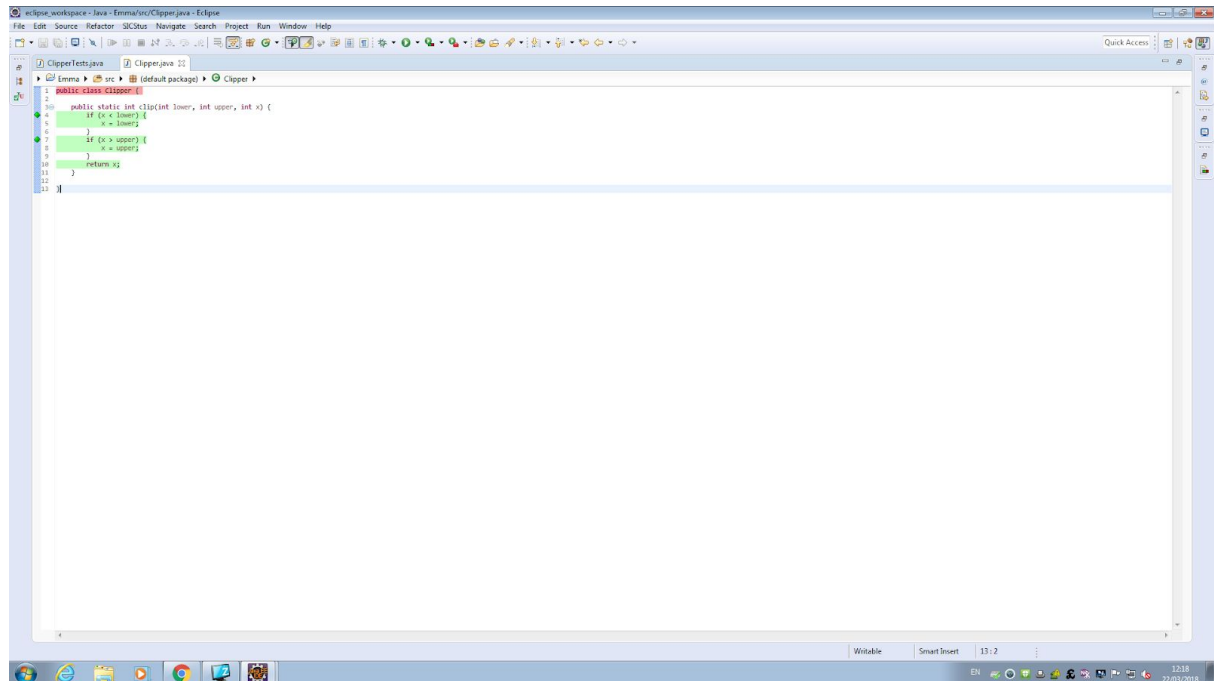
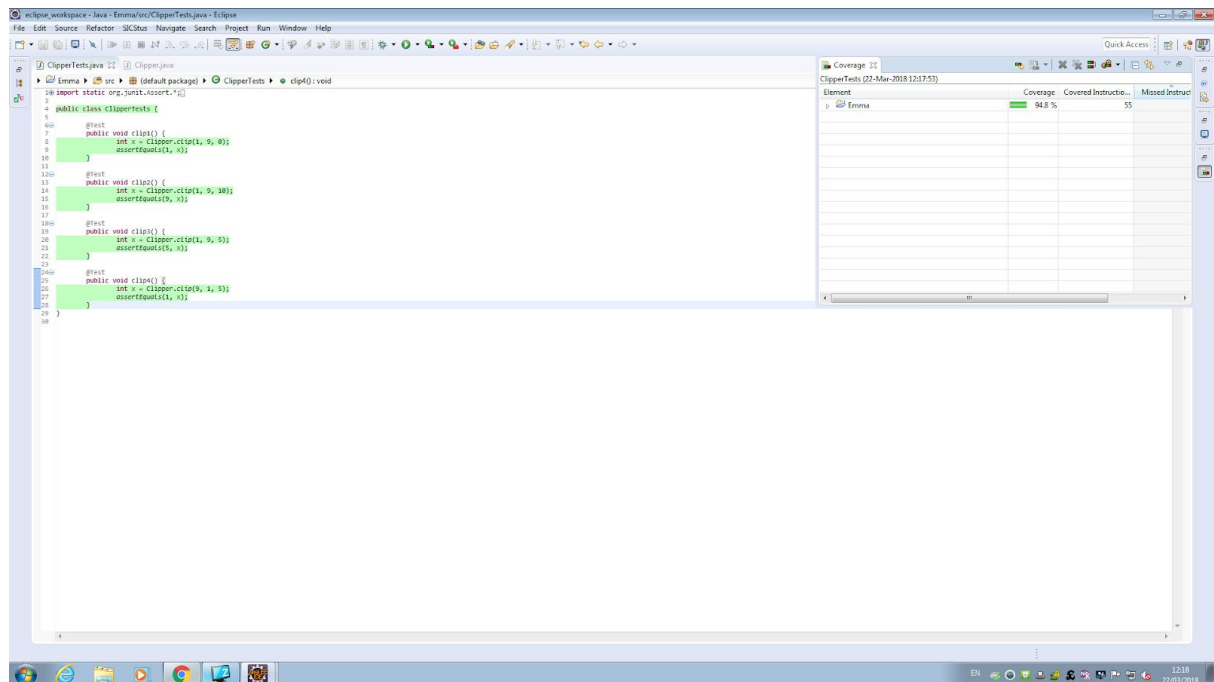


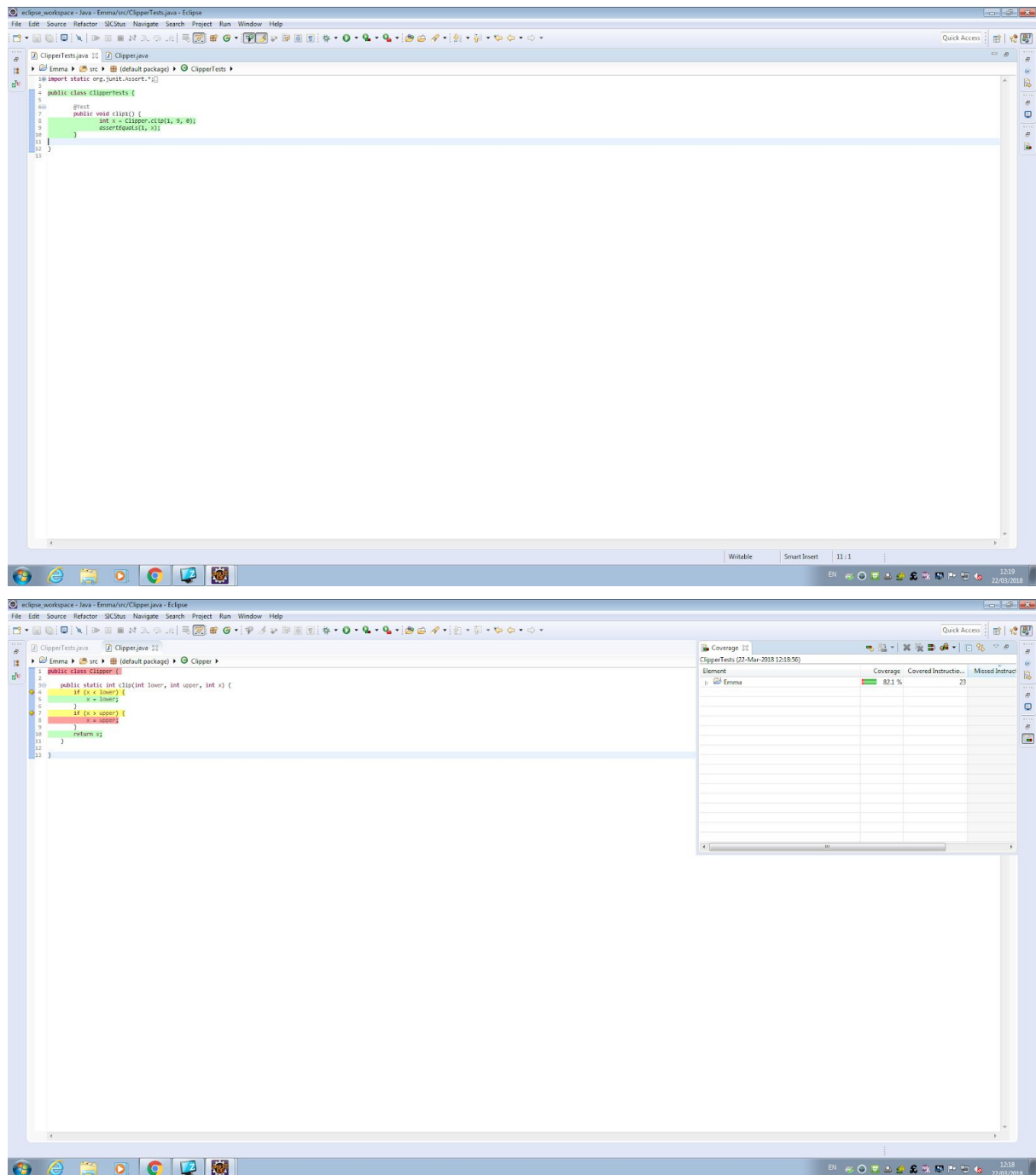
951428

960689

CS-135 Lab 6

Challenge Task 5.2





The class of clipper is red because you never have to initialize it.
It is not showing as 100% because some lines of code are not being tested by the tests in clipper tests.

Task 5.3

Eclipse workspace - Java - CS-135 Lab 6 Whitebox/ut/Main.java - Eclipse

File Edit Source Refactor OASus Navigate Search Project Run Window Help

Package Explorer: Main.java, Mortgage.java, Clipper.java, ClipperTests.java

Run: 12/12, Errors: 0, Failures: 0

Failure Trace

```

1: import static org.junit.Assert.assertEquals;
2:
3: public class Main {
4:
5:     @Test
6:     public void mortgage1() {
7:         int x = Mortgage.calculateMortgage(18, 30000, Mortgage.Gender.MALE);
8:         assertEquals(30000, x);
9:     }
10:
11:     @Test
12:     public void mortgage2() {
13:         int x = Mortgage.calculateMortgage(18, 30000, Mortgage.Gender.FEMALE);
14:         assertEquals(30000, x);
15:     }
16:
17:     @Test
18:     public void mortgage3() {
19:         int x = Mortgage.calculateMortgage(17, 30000, Mortgage.Gender.MALE);
20:         assertEquals(30000, x);
21:     }
22:
23:     @Test
24:     public void mortgage4() {
25:         int x = Mortgage.calculateMortgage(17, 30000, Mortgage.Gender.FEMALE);
26:         assertEquals(30000, x);
27:     }
28:
29:     @Test
30:     public void mortgage5() {
31:         int x = Mortgage.calculateMortgage(17, 30000, Mortgage.Gender.MALE);
32:         assertEquals(30000, x);
33:     }
34:
35:     @Test
36:     public void mortgage6() {
37:         int x = Mortgage.calculateMortgage(17, 30000, Mortgage.Gender.FEMALE);
38:         assertEquals(30000, x);
39:     }
40:
41:     @Test
42:     public void mortgage7() {
43:         int x = Mortgage.calculateMortgage(14, 30000, Mortgage.Gender.MALE);
44:         assertEquals(0, x);
45:     }
46:
47:     @Test
48:     public void mortgage8() {
49:         int x = Mortgage.calculateMortgage(18, 30000, Mortgage.Gender.FEMALE);
50:         assertEquals(0, x);
51:     }
52:
53:     @Test
54:     public void mortgage9() {
55:         int x = Mortgage.calculateMortgage(18, 30000, Mortgage.Gender.MALE);
56:         assertEquals(0, x);
57:     }
58:
59:     @Test
60:     public void mortgage10() {
61:         int x = Mortgage.calculateMortgage(18, 30000, Mortgage.Gender.FEMALE);
62:         assertEquals(0, x);
63:     }
64:
65:     @Test
66:     public void mortgage11() {
67:         int x = Mortgage.calculateMortgage(18, 30000, null);
68:         assertEquals(0, x);
69:     }
70:
71:     @Test
72:     public void mortgage12() {
73:         Mortgage mortgage = new Mortgage();
74:     }
75: }

```

Coverage: 92.7% (285 Covered Instructions, 265 Missed Instructions)

Eclipse workspace - Java - CS-135 Lab 6 Whitebox/ut/Mortgage.java - Eclipse

File Edit Source Refactor OASus Navigate Search Project Run Window Help

Package Explorer: Main.java, Mortgage.java, Clipper.java, ClipperTests.java

Run: 12/12, Errors: 0, Failures: 0

Failure Trace

```

1: public class Mortgage {
2:     public enum Gender {
3:         MALE, FEMALE
4:     }
5:
6:     public static int calculateMortgage(int nRt, int salary, Gender gender) {
7:         double factor = 0;
8:         if (gender == Mortgage.Gender.FEMALE) {
9:             if (31 <= nRt & nRt <= 35) {
10:                 factor = 7;
11:             } else if (36 <= nRt & nRt <= 45) {
12:                 factor = 2.5;
13:             } else if (46 <= nRt & nRt <= 55) {
14:                 factor = 3;
15:             }
16:         } else if (gender == Mortgage.Gender.MALE) {
17:             if (31 <= nRt & nRt <= 35) {
18:                 factor = 7.5;
19:             } else if (36 <= nRt & nRt <= 45) {
20:                 factor = 5.5;
21:             } else if (46 <= nRt & nRt <= 55) {
22:                 factor = 3.5;
23:             }
24:         }
25:         return (int)(salary * factor);
26:     }
27: }

```