GRIFFITH COLLEGE DUBLIN

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Student number:	3105292				
Faculty:	Computing Science				
Course:	BSCH/BSCO/EXCH		Stage/year:	2	
Subject:	Software Development 2				
Study Mode:	Full time	✔		Part-time	
Lecturer Name:	Gemma Deery				
Assignment Title:	Worksheet 1				
Date due:					
Date submitted:					

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Signed: _____Asralt____   Date: _____

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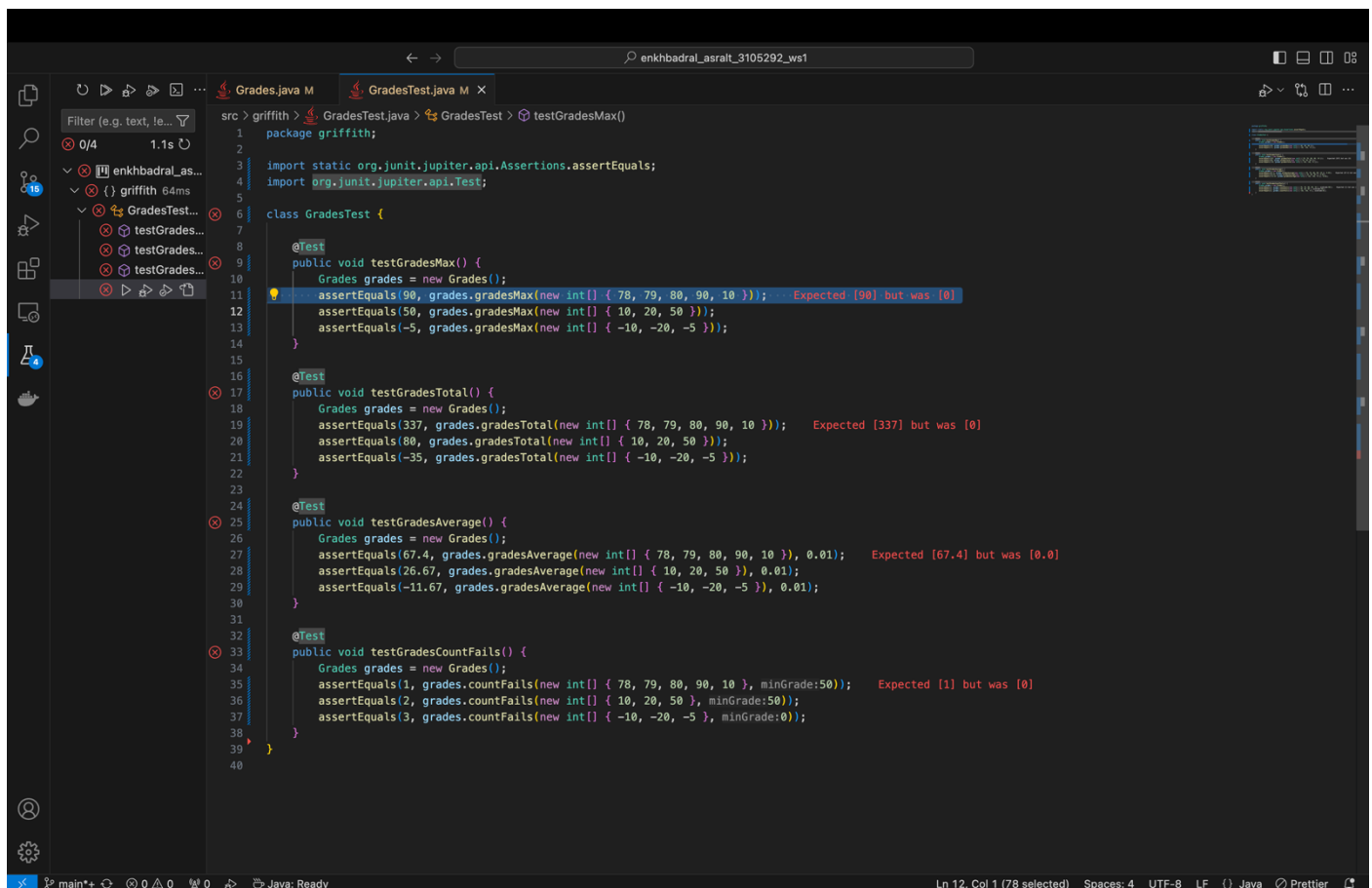
Please do not delete the questions.

For each question insert your answer below the question

Tasks:

Task1 I have left the Grades.java file with stub methods and I ran the test, here is the result I got back at the moment everything returns 0 so every method has failed
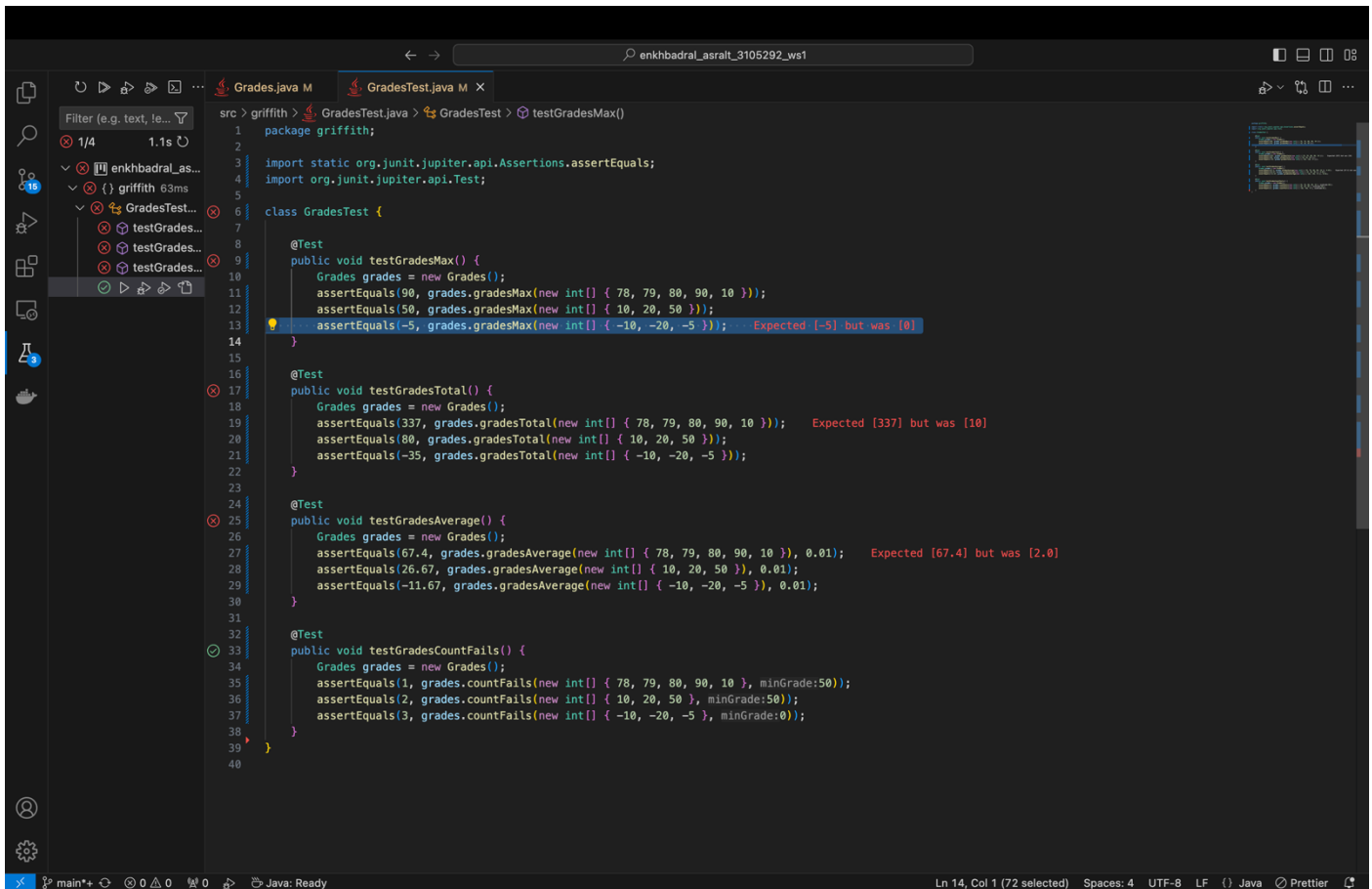


```java
package griffith;

import static org.junit.jupiter.api.Assertions.assertEquals;
import org.junit.jupiter.api.Test;

class GradesTest {

    @Test
    public void testGradesMax() {
        Grades grades = new Grades();
        assertEquals(90, grades.gradesMax(new int[] { 78, 79, 80, 90, 10 }));    Expected [90] but was [0]
        assertEquals(50, grades.gradesMax(new int[] { 10, 20, 50 }));
        assertEquals(-5, grades.gradesMax(new int[] { -10, -20, -5 }));
    }

    @Test
    public void testGradesTotal() {
        Grades grades = new Grades();
        assertEquals(337, grades.gradesTotal(new int[] { 78, 79, 80, 90, 10 }));    Expected [337] but was [0]
        assertEquals(80, grades.gradesTotal(new int[] { 10, 20, 50 }));
        assertEquals(-35, grades.gradesTotal(new int[] { -10, -20, -5 }));
    }

    @Test
    public void testGradesAverage() {
        Grades grades = new Grades();
        assertEquals(67.4, grades.gradesAverage(new int[] { 78, 79, 80, 90, 10 }), 0.01);    Expected [67.4] but was [0.0]
        assertEquals(26.67, grades.gradesAverage(new int[] { 10, 20, 50 }), 0.01);
        assertEquals(-11.67, grades.gradesAverage(new int[] { -10, -20, -5 }), 0.01);
    }

    @Test
    public void testGradesCountFails() {
        Grades grades = new Grades();
        assertEquals(1, grades.countFails(new int[] { 78, 79, 80, 90, 10 }, minGrade:50));    Expected [1] but was [0]
        assertEquals(2, grades.countFails(new int[] { 10, 20, 50 }, minGrade:50));
        assertEquals(3, grades.countFails(new int[] { -10, -20, -5 }, minGrade:0));
    }
}
```

Now after I implanted the Grades.java

Student Name Student Number

```java
package griffith;

import static org.junit.jupiter.api.Assertions.assertEquals;
import org.junit.jupiter.api.Test;

class GradesTest {

    @Test
    public void testGradesMax() {
        Grades grades = new Grades();
        assertEquals(90, grades.gradesMax(new int[] { 78, 79, 80, 90, 10 }));
        assertEquals(50, grades.gradesMax(new int[] { 10, 20, 50 }));
        assertEquals(-5, grades.gradesMax(new int[] { -10, -20, -5 }));    Expected [-5] but was [0]
    }

    @Test
    public void testGradesTotal() {
        Grades grades = new Grades();
        assertEquals(337, grades.gradesTotal(new int[] { 78, 79, 80, 90, 10 }));    Expected [337] but was [10]
        assertEquals(80, grades.gradesTotal(new int[] { 10, 20, 50 }));
        assertEquals(-35, grades.gradesTotal(new int[] { -10, -20, -5 }));
    }

    @Test
    public void testGradesAverage() {
        Grades grades = new Grades();
        assertEquals(67.4, grades.gradesAverage(new int[] { 78, 79, 80, 90, 10 }), 0.01);    Expected [67.4] but was [2.0]
        assertEquals(26.67, grades.gradesAverage(new int[] { 10, 20, 50 }), 0.01);
        assertEquals(-11.67, grades.gradesAverage(new int[] { -10, -20, -5 }), 0.01);
    }

    @Test
    public void testGradesCountFails() {
        Grades grades = new Grades();
        assertEquals(1, grades.countFails(new int[] { 78, 79, 80, 90, 10 }, minGrade:50));
        assertEquals(2, grades.countFails(new int[] { 10, 20, 50 }, minGrade:50));
        assertEquals(3, grades.countFails(new int[] { -10, -20, -5 }, minGrade:0));
    }
}
```

Task 2

With the Stub method and testing it

After implementing the Word.java

Link: https://github.com/asralt/enkhbadral_asralt_3105292_ws1

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