Computer Science 2

Spring 2018 – Dr. Gurka Project #7: Polynomial

February 19 / 20 Test Plan

Polynomial test plan

addition

case 1: all terms the same

4x^2 + 3x + 5

x^2 + 10x + 2

expected result

5x^2 + 13x + 7

case 2: no terms the same

x^4 + 10x^2

3x + 1

expected result

x^4 + 10x^2 + 3x + 1

case 3: one polynomial has more terms than the other

x

x^2 + 16

expected result

x^2 + x + 16

case 4: constant terms only

7

23

expected result

30

evaluate

case 1: single term

x

33

expected result

33

case 2: multiple terms, no missing terms

2x^3 + 5x^2 + 3x + 1

2

expected result

43

case 3: special case, x = 1

x^5 + 3x^2 + 4x

1

expected result

8

notes

* The accompanying input file is plain text; be sure to keep it that way when you save it.
* The input file has cases in a different order than the test plan.
* Be sure to check your program’s results against the test plan.