```
1
     package Version2;
 2
 3
     import java.util.ArrayList;
 4
 5
 6
     * This version of the vector class has 33% (or so) of it "completed", which hopefully is
 7
     * tested and around 33% of the tests will pass!
 8
9
     public class Vector {
10
11
         private int N = 0;
12
         private ArrayList<Double> data;
13
14
         //empty
15
         public Vector() {
             N=0;
16
17
              data = new ArrayList<Double>();
18
         }
19
20
         //a vector is created of size - size, with elements initalized to D
21
         public Vector(int size, double D) {
22
             N = size;
23
              data = new ArrayList<Double>();
24
              for(int i=0; i<size; i++) {</pre>
25
                  data.add(D);
26
              }
27
         }
28
29
         //a vector is created to be initialized to the array D
30
         public Vector(double [] D) {
31
              int length = D.length;
32
             N = length;
33
              data = new ArrayList<Double>();
34
              for(int i=0; i<length; i++) {</pre>
35
                  data.add(D[i]);
36
              }
37
         }
38
39
         //the vector is initalized to Int I
40
         public Vector(int [] I) {
41
              int length = I.length;
42
             N = length;
43
              data = new ArrayList<Double>();
44
              for(int i=0; i<length; i++) {</pre>
45
                  data.add( (double) I[i] );
46
              }
47
         }
48
49
         public void append(double[] doubleArray) {
50
              int len = doubleArray.length;
51
              for(int i=0; i<len; i++) {</pre>
52
                  data.add(doubleArray[i]);
53
              }
54
         }
55
56
         public void append(int[] intArray) {
57
              int len = intArray.length;
58
              for(int i=0; i<len; i++) {</pre>
59
                  data.add((double)intArray[i]);
60
              }
61
         }
62
63
         Vector append (Vector V) {
64
              throw new UnsupportedOperationException();
65
66
67
         Vector append(double aDouble) {
68
              throw new UnsupportedOperationException();
69
```

```
70
 71
          Boolean equal (Vector V) {
 72
              throw new UnsupportedOperationException();
 73
 74
 75
          int getLength() {
 76
              throw new UnsupportedOperationException();
 77
          }
 78
 79
          double getValue(int i) {
 80
              throw new UnsupportedOperationException();
 81
          }
 82
 83
          Vector add(Vector V) {
 84
              throw new UnsupportedOperationException();
 85
 86
 87
          Vector add(double aDouble) {
 88
              throw new UnsupportedOperationException();
 89
 90
 91
          Vector sub(Vector V) {
 92
              throw new UnsupportedOperationException();
 93
 94
 95
          Vector subV(int 1, int r) {
 96
              throw new UnsupportedOperationException();
 97
          }
 98
 99
          Vector Mult(Vector V) {
100
              throw new UnsupportedOperationException();
101
          }
102
103
          Vector Mult(double aDouble) {
104
              throw new UnsupportedOperationException();
105
          }
106
107
          Vector Normalize() {
108
              throw new UnsupportedOperationException();
109
          }
110
111
          double EuclidianDistance(Vector V) {
112
              throw new UnsupportedOperationException();
113
          }
114
      } // end version 2
115
```