1. Given the following declarations:
   int a = 2;
   int b = 3;
   double x = 2.0;
   double y = 1.5;
   double[] list = new double[3];

   a) Draw a diagram depicting the contents of the array list with its default values.

   ![Diagram showing default values]

   b) For each of the following assignments, if the code is legal Java, redraw the
   diagram from (a) and circle the element modified by the assignment; otherwise write “ERROR.”

   • list[1] = x;  
     ![Modified diagram showing x as 2.0]

   • list[b - a] = 3;  
     ![Modified diagram showing list[3] as 3.0]

   • list[b] = 4;  ERROR

   • list[x] = a;  ERROR

2. Show the output produced by the following code fragment:

   ```java
   double[] list = new double[4];
   for (int i=0; i < list.length; i++)
       list[i] = i + 3;
   for (int i=list.length - 1; i >= 0; i--)
       System.out.println(list[i]);
   ```

   ![Output]

3. Write a code fragment to create an array named bunchOfM of 5 char values and to set
   them all to the character ‘M’.

   ```java
   char[] bunchOfM = new char[5];
   for (int i=0; i < bunchOfM.length; i++)
       bunchOfM[i] = 'M';
   ```
Quiz 9 11/8/16 Name__________________KEY_________________ ___/20

1. Given the following declarations:
   ```java
   int a = 3;
   int b = 2;
   double x = 2.0;
   double y = 1.5;
   double[] list = new double[4];
   ```

   a) Draw a diagram depicting the contents of the array with its default values.
   
   - 0 1 2 3
   - 0.0 0.0 0.0 0.0

   b) For each of the following assignments, if the code is legal Java, redraw the diagram from (a) and circle the element modified by the assignment; otherwise write “ERROR.”
   - `list[x] = 1;` ERROR
   - `list[b] = y;` 0 1 2 3
   - 0.0 0.0 1.5 0.0
   - `list[b - a] = 3;` ERROR
   - `list[1] = -6;` 0 1 2 3
   - 0.0 -6.0 1.5 0.0

2. Show the output produced by the following code fragment:
   ```java
   double[] list = new double[4];
   for (int i=0; i < list.length; i++)
       list[i] = i * 3;
   for (int i=list.length - 1; i >= 0; i--)
       System.out.println(list[i]);
   ```
   
   Output:
   ```
   9.0
   6.0
   3.0
   0.0
   ```

3. Write a code fragment to create an array named `itsAllTrue` of 100 values of type `boolean` and to set them all to the value `true`.
   ```java
   boolean[] itsAllTrue = new boolean[100];
   for (int i=0; i < itsAllTrue.length; i++)
       itsAllTrue[i] = true;
   ```