Quiz 9

Name: ________________________________

1. Given the following declarations:
   
   ```java
   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 with its 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;

   - list[b - a] = 3;

   - list[b] = 4;

   - list[x] = a;

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 of 5 char values and to set them all to the character ’m’.
Quiz 9

Name:______________________________

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

   a) Draw a diagram depicting the contents of the array with its 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[x] = 1;
   
   • list[b - a] = 3;
   
   • list[b] = y;
   
   • list[1] = -6;

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 of 8 char values and to set them all to the character ‘h’.
Quiz 9

1) Given the following declarations:

```java
int a = 3;
int b = 2;
double x = 2.0;
double y = 1.5;
double[] list = new double[3];
```

For each of the following assignments, if the code is legal Java, draw a diagram showing the contents of the array and circle the element modified by the assignment; otherwise write “ERROR.”

a) `list[a] = a;`

b) `list[x] = x;`

c) `list[b] = 4;`

d) `list[(a * b)/4] = b;`

2) Draw a diagram showing the array contents after execution of the following code fragment:

```java
int[] list = new int[4];
for (int i=0; i < list.length; i++)
    list[i] = list.length - i;
```

3) Assume an array `list` has been declared and initialized as in the previous question. Write a code fragment that uses a loop to subtract 2 from each array element.
Quiz 9

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

   For each of the following assignments, if the code is legal Java, draw a diagram showing the contents of the array and circle the element modified by the assignment; otherwise write “ERROR.”

   a) list[a] = a;

   b) list[1] = y;

   c) list[x] = 4;

   d) list[(a * b)/4] = b;

2) Draw a diagram showing the array contents after execution of the following code fragment:

   int[] list = new int[4];
   for (int i=0; i < list.length; i++)
       list[i] = list.length * i;

3) Assume an array list has been declared and initialized as in the previous question. Write a code fragment that uses a loop to add 2 to each array element.