

Richard's Make Up Test

1. Use the array shown below to answer the following questions.

Cloudy	Sunny	Showers	Snow
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- a) If the array is called Weather, show the line of code needed to make the array, giving it size, but not the contents of each cell/at each index.

- b) After the code from (a) is executed, what will be the contents of each element? _____
- c) Write code to assign the values shown to the array. You don't have to show how to assign all four values, but simply show an example; please write the code to assign the first value (Cloudy) to the array, assuming code (a) has already executed.

- d) What is printed by the following? If there is an error, indicate specifically what kind it is/ why there is an error.

```
System.out.println(Weather[1] ); _____  
System.out.println(Weather.length ); _____  
System.out.println(Weather[Weather.length-2] ); _____  
System.out.println(Weather[4] ); _____
```

2. Use the array shown below to answer the following questions

0.1	0.2
0.3	0.6
0.5	1.0
0.7	1.4

- a) If the array above is called Rain, show the line of code needed to make the array, giving it size, but not the contents of each cell/at each index.

- b) After the code from (a) is executed, what will be the contents of each element? _____

- c) What is printed by the following? If there is an error, indicate specifically what kind it is/ why there is an error.

```
System.out.println(Rain[1][0] ); _____  
System.out.println(Rain.length[2] ); _____  
System.out.println(Rain[Rain.length-2][0] ); _____  
System.out.println(Rain[0][1] ); _____
```

- d) Write the code portion needed to assign values to the array, assuming (a) has already been executed. Use nested loops. If you don't see the simple pattern here, then you are welcome to use cases or if statements.

3. MailMerge.java

Software can be used to pull contact information from an array (called `contact`) and merge it with a form letter (`Letter.txt`). Use both files to generate a new file, called (`ToMail.txt`).

For example, if the `contact` array is like this (but has a lot more entries/rows):

Sally Stevens	123 Main Street Cupertino, CA 95014	(408) 456-7890
Jeff James	890 First Street Sunnyvale, CA 94087	(408) 123-4567

And `Letter.txt` is:

(name)

(address)

(phone)

Dear (name),

Thank you for your past support of our charity. We are writing to ask that you, (name), assist us one more time by donating to our foundation.

Sincerely,

Max Moore

Then `ToMail.txt` should be:

Sally Stevens

123 Main Street

Cupertino, CA 95014

(408) 456-7890

Dear Sally Stevens,

Thank you for your past support of our charity. We are writing to ask that you, Sally Stevens, assist us one more time by donating to our foundation.

Sincerely,

Max Moore

Write the full code to do this work, using the array and file I/O. Don't worry about specially formatting the address so it appears as one or two lines – either is fine.