$\qquad$

1. Write the output in the space provided on the right. Write ERROR if there is an error.

| Method | Method Call | Output |
| :---: | :---: | :---: |
| public static void q1_trace(int a)\{ | q1_trace(4); |  |
| System.out.print("a/2 = "+(a/2)); | q1_trace(5); |  |
| else\{ | q1_trace(6); |  |
| System.out.println("fun"); | q1_trace(-6); |  |
| \} | q1_trace(3); |  |

2. Write the output in the space provided on the right. Write ERROR if there is an error.


Name: $\qquad$
$\qquad$
3. Write a public static method named replaceLast that takes in a String s and a char cas arguments.

Return a modified String replacing the last character with the one that was passed in.
(Do not print out the String)
Example: replaceLast("map", 'n’);
Returns: "man"
4. Write a public static method named difference that takes in 2 arguments, int a and int b.

Calculate the difference and print a phrase and the value. (Do not return from the method)
If the difference between the two is greater than 10, print "Big Difference".
If the difference between the two is less than 10, print "Small Difference".
If there is NO difference between the two numbers, print "EQUAL"
Example: difference $(89,56)$;
Example: difference(70, 64);
Example: difference(43, 43);
Output: "Big Difference 33"
Output: "Small Difference 6"
Output: "EQUAL"

## Fall 2016 CMP167 Midterm

Name: $\qquad$ Date: $\qquad$
5. Write a public static method named life that takes in an int age and prints a phrase based on the rules below.
age is Less than 18 but greater than 0 print "Chillin"
age is Equal to or greater than 18 but less than 30 print "smooth sailing"
age is 30 or older but less than 70 print "working hard"
age is 70 or over print "silver and gold"
age is Zero or less "get real"

## Fall 2016 CMP167 Midterm

Name: $\qquad$ Date: $\qquad$
6. Write a method named howMany that does not take in any arguments.

Use the Scanner class to ask the user to enter a number between 1 and 5.
Print One of the following based on their entry.

| 1 | 2 | 3 | 4 | Anything Other Number |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| "Lonely Num" | "Company" | "Crowd" | "Fun" | "Party" | "Only 1 to 5 Please" |

