APCSA - Mixing numeric and string output

Mitch Feigenbaum

Lake Braddock Secondary School

1. What is the output after running the following code?

```
double x = 5.5;
int y = 2;
System.out.println(x/y);
```

2.75

2. What is the output after running the following code?

```
int x = 6, y = 3;
System.out.println(x + y + "bunny");
// Outputs 9bunny
System.out.println("bunny" + x + y);
// Outputs bunny63
System.out.println("bunny" + (x+y));
// Outputs bunny9
```

3. What is the output after running the following code?

```
int x = 8;
x = x/5;
x++;
x/=3;
System.out.println("The answer is: " + x + 3);
```

The answer is: 03

4. Write the code to ask the user their name and age and print out how many years until they are 100. Make age an int, not a double. (it should work for any name and age)

```
import java.util.Scanner;
public class tillHundred
    public static void main(String[] args)
        // Opens scanner for string input
        Scanner scanString = new Scanner(System.in);
        // Opens scanner for integer input
       Scanner scanInt = new Scanner(System.in);
        // Prompts user to input their name
       System.out.print("Hello, what is your name?\n=> ");
        // Saves user input to variable "name"
       String name = scanString.nextLine();
        // Prompts user to enter their age
       System.out.printf("Hello %s, how old are you?\n=> ", name);
        // Saves user input to variable age
        int age = scanInt.nextInt();
        // Creates variable "until100", which stores 100 subtracted by client age
        int until100 = 100 - age;
       // Prints the users name and time untill they turn 100
       System.out.printf("%s, you will be 100 in %s years.\n", name, until100);
```

5. Which of the following outputs:

j a

 \mathbf{v}

a

d. System.out.println(" $j\n\ta\n\t\tv\n\t\t\t$