PTest – Strings, Loops, Switch and Object Ref

Name___________________________
Date_____________________Per___

A. Fill in the blanks for each String problem. Assume each problem is independent; the values associated to the variables remain the same.

```
String a = new String ("pilgrims");
String b = new String ("Native Americans");
String c = a + " " + b; // space is between a and b variables
```

	Returned Value	Data Type
1. a.indexOf('i')	______________	______________
2. b.lastIndexOf('a')	______________	______________
3. a.indexOf('g', 3)	______________	______________
4. b.lastIndexOf('i', 6)	______________	______________
5. c.endsWith("cans")	______________	______________
6. c.trim().indexOf((char)(32))	______________	______________
7. a.substring(a.indexOf("grim")).toUpperCase()	______________	______________
8. a.compareTo(b)	______________	______________
9. a.equals(b.substring(0, 8))	______________	______________
10. b.substring(4, 10)	______________	______________

B. Answer the following questions about the program portion below.

```
String d = new String ("feast");
String e = "celebration";
String f = new String (d);
String g = e;
d = new String ("hoorah");
```

How many objects have been created? _____
How many objects are accessible? _____
Is there any garbage at the end of the program portion? _____
Are there any aliases at the end of the program portion? _____

Write true or false next to each expression below:
____ d == e ___ d == f ___ d == g ___ e == f ___ e == g ___ f == g
____ d.equals(e) ___ d.equals(f) ___ d.equals (g) ___ e.equals(f) ___ e.equals (g)
____ f.equals (g)

What will be outputted to the screen if the following line is executed?
System.out.println(d + " " + e + " " + f + " " + g);

____

C. In the English Language, words can be combined together to form contractions. Some popular contractions and their equivalent expanded versions are shown below:

Contraction	Expanded Version
don't	do not
shouldn't	should not
didn't	did not
can't	can not
couldn't	could not
hadn't	had not
won't	will not
shant	shall not

A program has been started for you. Fill in the space provided to do the following:

- Your program should be called ExpandContraction.java
- The program should have a constructor where the two String variables used (one for input and one for expanded Version) are reset to empty Strings.
- Input in the form of a single String should be accepted from the user in the method getInput().
- The expanded version should be two words, separated by a space, stored with one String variable.
- Use at least two String methods to work with the Inputted String and create the Expanded Version String; do the work with the Strings in the processString() method.
- You can assume that the only types of contractions that will be entered are the ones listed in the chart above, just as they are spelled above, as well as similar one such as isn’t.
- Print out the result, as shown in the example below, using the method printResult().
- Your program should repetitively accept user input and produce expanded versions until the user types "quit" or "QUIT" or any other non-case sensitive form of "quit." Any input other than "quit" will continue the program. ** Use a String method to process this input so the case of it does not matter! **

Example:

```
What contraction would you like to expand?
don't
The expanded form of don't is do not.

Would you like to expand another contraction?  Type quit to stop.
Yes

What contraction would you like to expand?
shant
The expanded form of shan't is shall not.

Would you like to expand another contraction? Type quit to stop.
Quit
```

```
import java.util.Scanner;
public class ______________________________
{
    private String contracted;
    private String expanded;
    private Scanner kb;

    public _________________________________( ) //this is the constructor
    {




    }
    public static void main(String [] args)
    {
        ExpandContraction ec = new ExpandContraction();
        ec.run();
    }
    public void run()
    {
        do
        {
            getInput();
            processString();
            printResult();
            System.out.println("Would you like to expand another contraction?  Type quit to stop");



        }while( _________________________________________ );

    }

    public void getInput ( )
    {
        System.out.println("What contraction would you like to expand?");




    }

    public void processString ( )
    {









    }
```

```
	public void printResult()
	{













	}
} // closes class
```