

**BACKGROUND**

A common *meme* is using a name generator to determine your name in some new context: “What’s Your Vampire Name?” “What’s Your Middle Earth Name?” etc. These name generators typically use your own personal information (name, birth month, etc.) as the source for generating a new name.

*Tis the season!* Here’s an Elf Name generator algorithm that is available online.



**OBJECTIVE**

In this assignment you’ll be writing the class `ElfName`, which will create a first and last elf name as described above, based on a given real first name and birth month.

**PROCEDURE**

1. **Examine `ElfNameRunner`**  
Use the `ElfNameRunner` class included below as a guide in considering how to implement your `ElfName` class.
2. **Consider how to implement the elf name identification process**  
Clearly the elven first names and last names depend on the values provided to the class, but you don’t want to write 26 `if-else` statements for the first name and 12 more `if-else` statements for the last name. Here’s a better strategy:
  - a. Identify the *index* of the input value in a list or array of values.
  - b. Using that same index, determine the corresponding output value from a corresponding list or array of values.

Example: The initial of my first name is “R,” which is the 18th letter in the list of alphabet letters.

My corresponding elf name is “Jolly,” which is the 18th name in the list of Elf first names.

### 3. Create the list/arrays as constants in your class.

This is a common strategy:

```
private static final String ALPHABET = "abcdefghijklmnopqrstuvwxyz";
private static final String[] MONTHS = {"january", "february", "march",
    "april", "may", "june", "july",
    "august", "september", "october",
    "november", "december"};
private static final String[] FIRSTNAMES = {"Perky", "Nipper", "Bubbles",
    "Happy", "Squeazy", "Sunny",
    "Merry", "Tootsie", "Kringle",
    "Puddin'", "Cookie", "Tinker",
    "Twinkle", "Buddy", "Elfie",
    "Jingle", "Snowflake", "Jolly",
    "Elvis", "Sugarplum", "Peaches",
    "Gingerbread", "Frisbee",
    "Evergreen", "Pinky", "Tinsel"};
```

... etc.

### 4. Write a short search loop for identifying the index of any given list/array as needed.

Some computer languages provide an `.indexOf()` method that will search for and return the index of a specified value. You can easily write your own for Java, however.

## REFERENCES

```
/**
 * The ElfNameRunner class asks the user for a firstName and birthMonth,
 * constructs an ElfName object for those values, and displays a corresponding
 * ElfName, both first and last.
 * @author Richard White
 * @version 2016-12-10
 */

import java.util.Scanner;

public class ElfNameRunner
{
    public static void main(String[] args)
    {
        Scanner in = new Scanner(System.in);
        String input = "y";
        while (input.substring(0,1).equals("y"))
        {
            System.out.print("Enter a first name: ");
            String firstName = in.next();
            System.out.print("... and enter a birth month: ");
            String birthMonth = in.next();
            ElfName elf = new ElfName(firstName, birthMonth);
            System.out.println("Your elf name is...");
            System.out.println(elf.getFirstName() + " " + elf.getLastName());
            System.out.print("\nWanna go again ('y')?");
            input = in.next();
        }
        System.out.println("Happy Holidays!");
    }
}
```