Intro Computer Science   Activity – ElfName

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 a program `ElfName.py`, which will include functions `getElfFirstName()` and `getElfLastName()` as well as a `main()` function that demonstrates the use of those functions

PROCEDURE

1. **Examine the ElfName `main()` function**
    Use the `ElfName` program 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, or index 17. My corresponding elf name is "Jolly," which is the 18th name in the list of Elf first names.

What does that look like in code? Assuming you have the lists already set up (see below):

```
elf_first_name = FIRSTNAMES[ALPHABET.index(name[0].lower())]
```
There's a lot of code to unpack there.

3. **Create the list/arrays as constants in your class.**
   This is a common strategy:

   ```
   ALPHABET = "abcdefghijklmnopqrstuvwxyz"
   MONTHS = ["january","february","march","april","may","june","july",
             "august","september","october","november","december"]
   FIRSTNAMES = ["Perky","Nipper","Bubbles","Happy","Squeezy","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 string or list as needed.**
   You can write a loop to identify the index of your data, or investigate the `.index()` method that you can use to search for and return the index of a specified value in a list. What happens if the `.index()` method *doesn't* find the value being searched for?

REFERENCES

```
def main():
    print("Enter your first name, please: ")
    first_name = input()
    print("And what month were you born (January, February, etc)? ")
    month = input()
    print("Your elf name is: ")
    print(getElfFirstName(first_name), getElfLastName(month))

if __name__ == "__main__":
    main()
```