Predict what the operations below will do.

a = 'Happy' b = 'Birthday'

+	Concatenation	a + b gives _____
*	Repetition	a * 3 gives _____
[]	Slice	b[1] gives _____
[:]	Range Slice	a[:2] + b[5:] gives _____
=	Assignment	c = b gives c = _____ and c is separate from b.
+=	Assignment & concatenation	c += ' Boy' gives c as _____
in	Membership	'p' in a gives True (or 1) **'t' in a gives ?** 'q' in a gives False (or 0)

STRINGS in Programming   PRIMM

Read, Write and then Modify the Code below.

For example, change some of strings or variables names.

Length of a String (Len)

A very useful function in programming is finding the Length of a string. Try the code below.

```python
# 3 successively longer strings
str1 = "Hello"
str2 = "Hello Goodbye"
str3 = "Hello Goodbye Slán"

# Find the length of each string
lenStr1 = len(str1)
lenStr2 = len(str2)
lenStr3 = len(str3)

#print the lengths
print(str1 + "\t"*3 + "Length = " , lenStr1)
print(str2 + "\t"*2 + "Length = " , lenStr2)
print(str3 + "\t" + "Length = " , lenStr3)
```

Outline some of your modifications

STRINGS in Programming   PRIMM

Read, Write and then Modify the Code below.

```python
# Program to output the sum and multiplication of any two numbers


userName = input("Please enter your name \t : ")

userNumber1 = int(input("Please enter your first number  \t :"))
```

> **What line of code could be behind me?**

```python
sumNum = userNumber1 + userNumber2
```

> **What line of code is behind me?**

```python
confirmStr = "Hi " + userName + ". The numbers you entered were " + \
             str(userNumber1) + " and " + str(userNumber2) + "\n"

print(confirmStr)
```

> **What line of code could be behind me?**

```python
print(sumStr)

productStr = "The product is " + str(productNum) + "\n"
print(productStr)
```

Some reflection thoughts

What were the main challenges in developing a logically correct program? (**LOs 1.4 and 2.20)**

Did you encounter any difficulties with data types? (**LOs 2.16 and 1.23)**

NOTES to YOURSELF