

Strings Assignment

May 28, 2021

0.1 Problem 1

Assume that `name` is a variable of type `String` that has been assigned a value. Write an **expression** whose value is the first character of the value of `name`. So if the value of `name` were “Jones” the expression’s value would be ‘J’.

```
[2]: def first_letter(name):  
      result = name[0]  
      return result  
first_letter("Jones")
```

```
[2]: 'J'
```

0.2 Problem 2

Write an expression whose value is the last character in the string associated with `name`. Remember how to index a string from the right instead of the left.

```
[3]: def last_letter(name):  
      result = name[-1]  
      return result  
last_letter("Jones")
```

```
[3]: 's'
```

0.3 Problem 3

Write an expression whose value is the string that consists of the first four characters of the string associated with `s`. Set `s = “abcdef”` and test your expression.

```
[4]: def first_four(s):  
      s = "abcdef"  
      result = s[0:4]  
      return result  
first_four("s")
```

```
[4]: 'abcd'
```

0.4 Problem 4

Given that `s` refers to a string, write an expression that evaluates to a string that is a substring of `s` and that consists of all the characters of `s` from its start through its fifth character. Set `s = "abcdef"` and test your expression.

```
[5]: def substring(s):  
      s = "abcdef"  
      slice = 5  
      result = s[:slice]  
      return result  
substring("s")
```

```
[5]: 'abcde'
```

```
[0]:
```

0.5 Problem 5

Write an expression that results in a String consisting of the second through fourth characters of the String `s`. Set `s = "abcdef"` and test your expression.

```
[27]: def substring(s):  
       s = "abcdef"  
       result = s[1:4]  
       return result  
substring("s")
```

```
[27]: 'bcd'
```

0.6 Problem 6

Write an expression that evaluates to `True` if the str associated with `s` starts with “p”. Test your expression with two different strings. In test 1, `s = "parameter"`. In test 2, `s = 'Parameter'`.

```
[20]: def check(name):  
       result = name.startswith('p')  
       return result  
check("parameter")
```

```
[20]: True
```

```
[21]: check("Parameter")
```

```
[21]: False
```

0.7 Problem 7

Write an expression that returns True if the str associated with s ends with “ism”. Test your expression with two different strings. In test 1, s = “capitalism”. In test 2, s = ‘religion’.

```
[17]: def check(name):  
        result = name.endswith('ism')  
        return result  
check ("capitalism")
```

[17]: True

```
[18]: check ("religion")
```

[18]: False

0.8 Problem 8

Given a variable s associated with a str, write an expression whose value is a str that is identical except that all the letters in it are upper-case. Thus, if the str associated with s were “Saint Martin”, the value of the expression would be “SAINT MARTIN”.

```
[24]: my_name = "Saint Martin"  
lower_name = my_name.lower()  
  
upper_name = lower_name.upper()  
print(upper_name)
```

SAINT MARTIN

0.9 Problem 9

Write a sequence of statements that finds the first comma in the string associated with the variable s, and associates the variable first with the portion of s up to, but not including the comma. Test your statements with s = “Hello, world”.

```
[32]: s=input()  
first="Hello World"  
for I in s:  
    if I==",":  
        break  
    else:  
        first =first+I  
print(first)
```

Hello, WorldHello WorldHello

0.10 Problem 10

Write an expression whose value is the arithmetic sum of the int associated with x, and the all-digit str associated with s. Test your expression with x = 10 and s = “5”.

```
[8]: x = 10  
     s = "5"  
     sum = x + int(s)  
     print(sum)
```

15

```
[0]:
```