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**Week 7 In Class Exercises**

1. What is the output of the instruction? First do all the predictions, then use Spyder to see the actual output.

hello\_str = “Hello World”

num = 234

vowels = “aeiou”

new\_str = “WOU is #1”

my\_str = “Hello”

your\_str = “World”

|  |  |  |
| --- | --- | --- |
| **Instruction** | **Prediction** | **Actual** |
| hello\_str[0] | H | H |
| hello\_str[5] | -space- | -space- |
| hello\_str[-1] | d | d |
| hello\_str[10] | d | d |
| hello\_str[11] | Error | Error |
| hello\_str[6:10] | orld | Worl |
| hello\_str[6:] | orld | World |
| hello\_str[:5] | Hello | Hello |
| hello\_str[3:-2] | o Wor | lo Wor |
| hello\_str[0:5] | Hello | Hello |
| hello\_str[: : 2] | el ol | HloWrd |
| hello\_str[: : 3] | lWd | HlWl |
| hello\_str[: : -1] | dlroW olleH | drWolh |
| hello\_str[: : -2] | lo le | drWolH |
| hello\_str[1 : : 2] | el ol | el ol |
| hello\_str[-2 : : -2] | o le | lo le |
| hello\_str[-8 : 8] | lo wo | lo Wo |
| hello\_str[0 : -1 : 2] | el ol | HloWr |
| hello\_str[-7:] | World | o World |
| name\_1 = ‘Wolfie’  name\_2 = name\_1[:]  print(name\_2) | Assigns Wolfie  Assigns Wolfie  Wolfie | Wolfie |
| for char in “Go WOU!”:  print(char) | Go WOU! | G  O  W  O  U  ! |
| my\_str + your\_str | HelloWorld | HelloWorld |
| your\_str + my\_str | WorldHello | WorldHello |
| my\_str \* 3 | HelloHelloHello | HelloHelloHello |
| 3 \* my\_str | HelloHelloHello | HelloHelloHello |
| ‘hello’ + 3 | Error | error |
| type(my\_str) | Nothing | Nothing |
| type(num) | Nothing | Nothing |
| type(3.14159) | Nothing | Nothing |
| ‘abc’ < ‘cde’ | True | True |
| ‘abc’ < ‘abd’ | True | True |
| ‘abc’ < ‘abcd’ | True | True |
| ‘ ‘ < ‘a’ | False | True |
| ‘a’ in vowels | 1 | True |
| ‘x’ in vowels | 0 | False |
| ‘eio’ in vowels | True | True |
| ‘aiu’ in vowels | False | False |
| if ‘e’ in vowels:  print(“It’s a vowel”) | It’s a vowel | It’s a vowel |
| new\_str.find(“#”) | 7 | 7 |
| new\_str.find(“is”) | 4 | 4 |
| new\_str.find(‘z’) | Not in new\_str | -1 |
| new\_str.index(“#”) | 7 | 7 |
| new\_str.index(‘z’) | Not in new\_str | Substring not found error |
|  |  |  |

1. Complete zyLabs 7.5 – 7.11