**In-Class Exercise**

1. **State differences between Python 2 and Python 3 version. Write a Python program to get the Python version you are using.**

**Differences are:**

|  |  |
| --- | --- |
| **Python 2** | **Python 3** |
| Syntax of print is print “Example” | Syntax of print is print(“Example”) |
| We can use 3rd party libraries in this version | We cannot use 3rd party libraries in this version. Limited support of modules |
| New features are not implemented | New features are implemented in this version |
| Better documentation available | Documentation is not great in this version |
| No byte type | 2 Byte type classes are available |
| xrange() is available to create an iterable object and is faster than python 3 | xrange() is not available anymore and replaced by range() which is slower than python 2 |
| No need to use “as” to handle exceptions | Need to use “as” to handle exceptions |
| For loop variables leak | For loop variable don’t leak anymore |
| It doesn’t always return float output during division with integers | It always returns float output during division with integers |

**Program:**

**A screenshot of a social media post

Description generated with very high confidence**

**Output:**

**A screenshot of a social media post

Description generated with very high confidence**

1. **Write a python program to**
2. **Take the user first name and last name and then print it in reverse order**

**Program:**

**A screenshot of a computer

Description generated with very high confidence**

**Output:**

**A screenshot of a social media post

Description generated with very high confidence**

1. **To take two numbers from user and find their quotient and remainder. Print it**.

*Sample input:*

Enter First Number: 11

Enter Second Number : 2

*Sample output:*

Quotient is 5 and remainder is 1.

**Program:**

**A screenshot of a social media post

Description generated with very high confidence**

**Output:**

**A screenshot of a social media post

Description generated with very high confidence**

1. **Write a python program to**

**This is a number guess exercise. First pick a random digit via program i.e 0,1,2,3,4,5,6,7,8,9**

**Ask the user to guess the digit randomly picked by your program. Then print whether the number guess by the user is perfect or below the random number or above the random number. Also your program should explain the rules of this number guess game to the user.**

\*\*\* *use random module. You need to use import statement here*.

Suppose the digit generated by program is 8

*Sample input:*

Guess the digit: 7

*Sample output:*

Your answer is low than required

*Sample input:*

Guess the digit: 8

*Sample output:*

Your answer is PERFECT!! Congratulations!!

*Sample input:*

Guess the digit: 9

*Sample output:*

Your answer is high than required

**Program:**

**A screenshot of a computer

Description generated with very high confidence**

**Output:**

A screenshot of a social media post

Description generated with very high confidence

**A screenshot of a social media post

Description generated with very high confidence**

**A picture containing screenshot

Description generated with very high confidence**