CSC 104 ASSIGNMENT

SECTION 1

These questions are to be answered in a Microsoft document file (.docx).

1. **Mention 12 uses or application of Python programming and which is your favorite use?**

**Answer: Twelve (12) uses/application of python programming:**

1. **Web and Internet Development:** There are many excellent Python web frameworks including, Pyramid, Django and Flask, etc.
2. **Internet protocols**: Python's standard library supports many Internet protocols: HTML and XML, JSON, E-mail processing, Support for FTP, IMAP, and other Internet protocols and Easy-to-use socket interface.
3. **Scientific and Numeric:** Python is widely used in scientific and numeric computing: Scipy (collection of packages for mathematics, science and engineering), Raspberry pi (used to design Robots) and Pandas (daily analysis and modeling library).
4. **Education:** Python is a superb language for teaching programming, both at the introductory level and in more advanced courses.
5. **Desktop GUIs:** To develop a cross-platform desktop application python can be used. Python has modules Tkinter, PyQt to support it and Platform-specific toolkits are also available such as GTK+ and  Microsoft Foundation Classes through the win32 extensions.
6. **Software Development:** Python is often used as a support language for software developers, for build control and management, testing, and in many other ways.
7. **Machine Learning:** Python can be used to do cool things such as predicting stocks, fingerprint identification, spam detection etc. using machine learning. Python has modules scikit-learn, theano, tensorflow to support it. Currently Deep Learning is all the hype and Tensorflow has support for Deep Learning.
8. **Computer Vision:** You can do many interesting things such as Face detection, Color detection while using Opencv and Python.
9. **Game Development:** Create a video game using module Pygame. Basically, you use Python to write the logic of the game. PyGame applications can run on Android devices.
10. **Browser Automation:** Perform some neat things such as opening a browser and posting a Facebook status, you can do it with Selenium with Python.
11. **Artificial Intelligence:** python has play vital role in easyAI and SimpleAI.
12. **Cryptography:** Encrypt and decrypt library, something like, RSA, RC4, DES
13. **What keyword tells Python to display something on the screen?**

**Answer:** print

1. **Complete the line of code to tell Python to display the name of the oval object laid by a hen. (1 word, lower-case).**

**Print\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Answer:**print("egg")

1. Because of the quotation marks, Python identifies the greeting

"Hello, World!" as a \_\_\_\_\_\_\_ (1 word, lowercase).

**Answer:** string

1. Because there are no quotation marks, Python identifies the set of characters below as a \_\_\_\_\_\_\_.

computer\_science

**Answer:** variable

1. Type the illegal character in the variable name below.

2nd\_runner\_up.

**Answer:** 2

1. What is the value of total?

number = 10

total = number + 2

**Answer:** 12

1. Rewrite this so total equals 10.

total = "4" + 6

**Answer:** total = int('4') + 6

1. What is the value of third\_number?

first\_number = 5

second\_number = 6

third\_number = first\_number \* second\_number

**Answer:** 30

1. Type the illegal character in this variable name:

fourth-Player

**Answer: -**

1. Rewrite below variable name using the recommended style:

Customerlastname

**Answer:** customer\_last\_name

1. Code the shorthand version of the following statement:

total = total + 5

**Answer:** total += 5

1. Type the modulo operator

**Answer:** %

1. What is the value of total\_cost?

total\_cost = 1 + (3 \* 4)

**Answer:** 13