**PW Assignment 1: Solution**

1) Guido Van Rossum

2) object oriented and structured programming

3) yes

4) .py

5) interpreted

6) Indentation

7) Hash Mark (#)

8) sys.version()

9) lambda

10) Preferred Installer Program

11) print(), input() etc

12) 79 characters

13) The Benefits of using python are:

* Extensive support libraries(NumPy for numerical calculations, Pandas for data analytics, etc.)
* Open source and large active community base
* Versatile, Easy to read, learn and write
* User-friendly data structures
* High-level language
* Dynamically typed language(No need to mention data type based on the value assigned, it takes data type)
* Object-Oriented and Procedural Programming language
* Portable and Interactive
* Ideal for prototypes – provide more functionality with less coding
* Highly Efficient(Python’s clean object-oriented design provides enhanced process control, and the language is equipped with excellent text processing and integration capabilities, as well as its own unit testing framework, which makes it more efficient.)
* Internet of Things(IoT) Opportunities
* Interpreted Language

14) Memory management in Python involves a private heap containing all Python objects and data structures. The management of this private heap is ensured internally by the Python memory manager. The Python memory manager has different components which deal with various dynamic storage management aspects, like sharing, segmentation, preallocation or caching.

15) Install python from this link <https://www.python.org/downloads/>  
After this, install it on your PC

To set path follow the steps:

Right click on My Computer ->Properties ->Advanced System setting ->Environment Variable ->New

In Variable name write path and in Variable value copy path up to C://Python(i.e., path where Python is installed). Click Ok ->Ok.

16) yes