PW Skills 29th Jan Python Assignment

1. Who developed Python Programming Language?

Python is developed by Guido van Rossum

2. Which type of Programming does Python support?

Python is an interpreted programming language, supporting object-oriented, structured, and functional programming.

3. Is Python case sensitive when dealing with identifiers?

Yes, Python is a case-sensitive language

4. What is the correct extension of the Python file?

 Python correct extension is **(.py)**

5. Is Python code compiled or interpreted?

Python is both compiled as well as an interpreted language. This means when we run a python code, it is first compiled and then interpreted line by line. The compilation part is mostly hidden from the user. While running the code, Python generates a byte code internally, this byte code is then converted using a python virtual machine (p.v.m) to generate the output.

6. Name a few blocks of code used to define in Python language?

Indentation is used to define a block of code in python

7. State a character used to give single-line comments in Python?

We can write a single-line comment by adding a single **#** character before any statement or line of code

8. Mention functions which can help us to find the version of python that we are currently working on?

The function **sys. version** can help us to find the version of python that we are currently working on.

9. Python supports the creation of anonymous functions at runtime, using a construct called ?

"lambda"

10. What does pip stand for python?

pip stands for **"preferred installer program"**

11. Mention a few built-in functions in python?

print( ) function.

type( ) function.

input( ) function.

sorted( ) function.

max( ) function.

12. What is the maximum possible length of an identifier in Python?

An identifier can have a maximum length of **79** characters in Python

13. What are the benefits of using Python?

Python programming is a general-purpose skill used in almost all fields, including:

- Data science
- Scientific and mathematical computing
- Web development
- Finance and trading
- System automation and administration
- Computer graphics
- Basic game development
- Security and penetration testing
- General and application-specific scripting
- Mapping and geography (GIS software)

14. How is memory managed in Python?

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.

15. How to install Python on Windows and set path variables?

Installing and using Python on Windows is very simple. The installation procedure involves just three steps:

1. Download the binaries
2. Run the Executable installer
3. Add Python to PATH environmental variables

The complete path of python.exe can be added by:

1. Right-clicking This PC and going to Properties.
2. Clicking on the Advanced system settings in the menu on the left.
3. Clicking on the Environment Variables button on the bottom right.
4. In the System variables section, selecting the Path variable and clicking on Edit.
5. The next screen will show all the directories that are currently a part of the PATH variable.
6. Clicking on New and entering Python's install directory.

16. Is indentation required in python?

The indentation in Python is very important. Python uses indentation to indicate a block of code.