❖ ***ASSIGNMENT DAY 1 PYTHON***

Assignment Questions

SKILLS

1. Who developed Python Programming Language?
2. Which type of Programming does Python support?
3. Is Python case sensitive when dealing with identifiers?
4. What is the correct extension of the Python file?
5. Is Python code compiled or interpreted?
6. Name a few blocks of code used to define in Python language?
7. State a character used to give single-line comments in Python?
8. Mention functions which 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 _____
10. What does pip stand for python?
11. Mention a few built-in functions in python?
12. What is the maximum possible length of an identifier in Python?
13. What are the benefits of using Python?
14. How is memory managed in Python?
15. How to install Python on Windows and set path variables?
16. Is indentation required in python?

❖ SOLUTION

1. **Python Programming Language was developed by Guido Van Rossum in 1991. It comes into existence by February 20,1991.**
2. **Python support object-oriented programming, structured, and functional programming.**
3. **Yes, Python is a case-sensitive language because in python you must avoid using the same name with different cases while naming identifiers.**

- **Reserved keywords (special words used for a specific purpose, e.g., while, for, if, etc.) cannot be used as identifier names.**
- **Python identifiers can contain lowercase letters (a-z), uppercase letters (A-Z), numerals (0-9), and underscores (_). This means that Identifiers in Python cannot contain special characters except underscore in them.**
- **The name of the identifier cannot begin with a number.**
- **The name of a Python identifier can begin with an underscore.**
- **The length of the identifier name is unrestricted.**
- **The names of Python identifiers are case sensitive.**

4.The correct extension of the python file is .py.

5. Python is an interpreted language so it is both compiled as well as interpreted because when we run a python code, it is first compiled and then interpreted line by line.

6. A module, a function body and a class definition are the few blocks used to define in python language.

7. Hash character (#) is used to give single-line comments in python.

8. By using sys.version method , python_version() function and Python-V command we are able to find the version of python that we are currently working on.

9. Lambda

10. pip is a package management system used to install and manage software packages in python.

11. Some built-in functions in python are:-

- **print( ) function**
- **type( ) function**
- **input( ) function**
- **max( ) function**
- **min( ) function**

12. An identifier can have maximum length of 79 characters in python.

13. Benefits of using python are:-

- **versatility**
- **easy to understand**
- **easy to read**
- **built-in modules**
- **wide range of Libraries**
- **Scopes of Development**

14.Memory is managed in python by using a private heap containing all python objects and data structures. The python memory manager uses API methods to handle the allocation and deallocation of this heap space.

15. Install python from this link https://www.python.org/downloads/. After this installation look for the location where python has been installed on your PC.

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

16.Yes, Indentation is very important in python because it indicate a block of code where user writes their code properly and the readability of code is so smoother.