

Assignment 1 - MLP

- 1) what is python [programming language]
python is a high level general purpose programming language. its design philosophy emphasizes code readability with the use of significant indentation
- 2) who designed python.
Guido van Rossum
- 3) The developer of python
python software foundation
- 4) List out some key Areas of python
 - web Development
 - Data science and machine learning
 - Automation and scripting
 - software Development
 - scientific computing
 - education
 - gaming

5) Advantages of python

- * Comprehensive libraries and frameworks
- * Ease of learning and use.
- * Highly embeddable
- * Automatic memory management.
- * Large community and open source.

6) Disadvantages of python

slow execution speed

dynamically typed

high memory consumption

threading limitations

database interaction challenges

7) Data types in python

1) Numeric data types

int, float, complex

2) String data types

str

3) Sequence types

list, tuple, range

- 4) Binary types
bytes, bytearray, memoryview
 - 5) mapping data type
dict
 - 6) Boolean type
bool
 - 7) set data types
set, frozenset.
- 8) what are variables in python
variables in python are symbolic names pointing to objects or values in memory.
- 9) what are lists in python
A list is a data structure in python that is a mutable, changeable, ordered sequence of elements.
- In python, lists allow us to store multiple items in a single variable.

10) what are the two main types of functions in python.

- * Built-in
- * user defined

Built-in functions like print(), len() and abs() are available by default.

11) List out the operators in python?

→ there are 7 types of operators namely.

- Arithmetic
- Assignment
- Comparison
- logical
- Bitwise
- membership
- identity

12) which are the two modes of python.

- script
- interactive

13)

what are the applications of python?
python is commonly used for the
internet applications, artificial intelligence
and machine learning, data analytics
and scripting.

it has also been use widely
in industries such as cybersecurity,
finance and game development.