



Undo



Redo

1.

Artificial intelligence is the ability of a computer or computer-controlled robot to perform tasks that are commonly associated with the intellectual processes characteristic of humans, such as the ability to reason.

APPLICATIONS OF ARTIFICIAL INTELLIGENCE::

Artificial Intelligence has various applications in today's society. It is becoming essential for today's time because it can solve complex problems with an efficient way in multiple industries, such as Healthcare, entertainment, finance, education, etc. AI is making our daily life more comfortable and fast.

2.

Supervised learning algorithms are trained using labeled data. Unsupervised learning algorithms are trained using unlabeled data. Supervised learning model takes direct feedback to check if it is predicting correct output or not. Unsupervised learning model does not take any feedback.

3.

Python is a popular programming language. It was created by Guido van Rossum, and released in 1991.

It is used for:

- i) web development (server-side),
- ii) software development,
- iii) mathematics,
- iv) system scripting.

Features and advantages of python:

Easy to Read. ...

Free and Open-Source. ...

Robust Standard Library. ...

Interpreted. ...

Portable. ...

Object-Oriented and Procedure-Oriented. ...

Extensible.

4.

Python is the major code language for AI and ML. It surpasses Java in popularity and has many advantages, such as a great library ecosystem, Good visualization options, A low entry barrier, Community support, Flexibility, Readability, and Platform independence.

- 1. A great library ecosystem
- 2. A low entry barrier
- 3. Flexibility
- 4. Platform independence
- 5. Readability
- 6. Good visualization options

5.

Python relies on indentation to define the scope and structure of statements, loops, and functions. Unlike other programming languages that use curly braces or keywords, Python uses indentation to group statements together.

6.

The variable acts as an address for where the data is stored in memory.

1)A variable name must start with a letter or the underscore character

2)A variable name cannot start with a number

3)A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)

4)Variable names are case-sensitive (age, Age and AGE are three different variables)

5)A variable name cannot be any of the Python keywords.

Examples:

```
myvar = "John"
```

```
my_var = "John"
```

```
_my_var = "John"
```

```
X=1
```

```
Y=2.1
```

7.

A keyword refers to a predefined word that python reserves for working programs that have a specific meaning. You can't use a keyword anywhere else. Python Identifiers are the different values that a programmer can use to define various variables, integers, functions, and classes.

8.

Different Kinds of Python Data Types:

i)Numeric data types: int, float, complex.

ii)Sequence types: list, tuple, string.

iii)Mapping data type: dict.

iv)Boolean type: bool.

v)Set data types: set.

9.

Syntax of if condition in python:

```
if condition:
```

```
(indentation) statements
```

10.

'Elif' stands for 'else if' and is used in Python programming to test multiple conditions. It is written following an if statement in Python to check an alternative condition if the first condition is false. The code block under the elif statement will be executed only if its condition is true.