1.define artifical intelligence:technology that enables computers and digital devices to learn, read, write, create.

examples:

1. machine learning

2.natural language processing.

3.computer vision.

4.robotics.

5.deep learning.

2.Difference between supervised and

Supervised and unsupervised learning are two main categories of machine learning techniques, each with distinct characteristics and purposes.

supervised : mode of training with labled data

1.Regression

Unsupervised: mod of training with unlabled data

1.Clustering

what is python?

Python is a high-level, interpreted programming language known for its simplicity, readability, and versatility

FEATURES AND ADVANTAGES

1.Readablility and Simpilicitty

2.Dynamic Typing

3.Extensive Standard Library

4.Platform Independent

5.Verstility

What are the advantages of using python as a programming language for AI and ML?

Python is widely regarded as one of the best programming languages for artificial intelligence and machine learning.

ADVANTAGES:

1.Rich ecosystem of libraries

2.Support of data handilling

3.Flexibility and interoperablity

4.Community and Support

importance of indentation in python?

which states the block of statements or code as it is a part of syntax

as in other languages we use curly brackets in python indentation to denote the code.

1.code debugging

2.syntax requirement

3.Avoid ambiguity

4.block structure

define a variable with examples for valid variable namees?

Variables are used to store and mainpulata data .

examples:

ex1:

age=23

print(age)

# integer variable

ex2:

height=1.56

print(height)

# float variable

ex3:

name="vishnu"

print(name)

# string variable

etc...

Difference between keyword and an identifier?

keywords and identifiers are fundamental concepts

1. keywords are reseved words in a proramminglanguage that have special meanings and used to define the structure and logic of a program.

ex:

if,else,for,while,classetc.

identifiers:

identifiers are user define names given to various program elements such as variables,functions,classes,etc.

They are used to represent data or code elements and help make the program more readable

ex:

calculate\_area,employee

There are some rules for identifiers .

list the basic datatype in python?

There are several datatypes are avaliable in python.

they are :

1.integer

2.float

3.string

4.boolean

5.list

6.tuple

7.dictionary

8.set

describe the syntax for if statement in python?

if statement in python which allows to execute a block of statement with a specific condition

syntax:

if condition

statement1

statement2

....

the statement begins with if keyword

if the condition is true the statement will execute and if false then the code block will skip.

purpose of elif statement in python?

else if which indicates the alternative for if statement for multiple conditions in a sequence

which is clear and more readable

1.sequencial condition checking

2.efficiency

3.avoiding multiple if statements.