1.Define artificial intelligence and provide examples of its applications?

Artificial Intelligence (AI) refers to the simulation of human intelligence processes by machines, particularly computer systems. These processes include learning, reasoning, problem-solving, perception, and understanding natural language.

examples of its applications: 1. machine learning 2. Natural language processing. 3.Computer vision. 4.Robotics. 5.Deep learning. 6.Gaming.

2.Difference between supervised and unsupervised techniques in ML? supervised and unsupervised learning are two main categories of machine learning techniques, each with distinct characteristics and purposes.

supervised: mode of training with labelled data 1. Regression
Unsupervised: mod of training with unlabelled data 1.Clustering

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3.What is python?

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

FEATURES AND ADVANTAGES 1. Readability and Simplicity 2. Dynamic Typing 3. Extensive Standard Library 4.Platform Independent 5.Verstility

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4.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 handling 3. Flexibility and in operability 4. Community and Support

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5.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

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6.Define a variable in python with examples for valid variable names?

Variables are used to store and manipulation data.

examples:

ex1: integer variable age=23 print(age)

ex2: float variable height=1.56 print(height)

ex3: string variable name="saisri" print(name)

etc...

7.Difference between keyword and an identifier in python?

keywords and identifiers are fundamental concepts of python.

1. Keywords are reversed words in a programming language that have special meanings and used to define the structure and logic of a program. ex: if else, for, while, class, etc.

2.Identifiers: identifiers are user define names given to various program elements such as variable, 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.

8.list the basic datatype in python?

There are several datatypes are available in python. they are: 1. integer 2. float 3. string 4. Boolean 5. list 6. tuple 7.dictionary 8.set

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9.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.

10.Purpose of elf 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. sequential condition checking 2. efficiency 3. avoiding multiple if statements.