Assignment 1

1A) Artificial Intelligence is nothing but a machine which can be think and performs actions as a human . In order to attain it .It had to go through various training practices.

Applications of AI are:

1. In industrial and factory sectors.
2. Self driving cars .
3. Mobile and laptop applications.
4. National Security Agencies.
5. Farming fields .

2A) Differnces between Supervised and Unsupervised Learning.

\*Supervised:

1. labeled data

2.learning mapping from inputs to outputs for prediction

3.Feedback based on labeled data

4.predicting outcomes ,classifying data

5. EX ) :classification ,Regression

\*Unsupervised Learning:

1.Unlabeled data

2.discovers hidden patterns or structure in data

3.less feedback results .It is based on usefulness of data.

4. exploring data analysis ,understanding datastructure when labeled data is unavailable

5.clustering,dimensionality reduction ,Anamoly Detection

3A) 1. Python is a object oriented programming language

2. Python is a beginner friendly and easily understandable language

3.It consists of many open source libraries.

4. Used in AI , software development , Web development

4A) Advantages for using python:

1: No rules and restrctions for loops and structure format of code

2: Many libraries to support ai

3: No compilation required

4: Easy to understand the cod

5A) Importance of indentation in python

!.Generally python do not require brackets to close the fuctions or loops .

2.It has different method .It uses ‘ : ’ symbol to start a function or loop and indentation to continue it . If the indentation is not used it indicates close of loop or function

3. So Indentation is required in python to continue the loop or function . It indicates 4 white spaces

6A) a = 20

It is a int variable

Name = ‘’ John’’

b = 4.5

i=5

c = i>6

print(c) -> It gives Boolean value

7A) Identifier \*

1.These are the names given to variables and functions

2. Identifiers should not contain special characters

Keywords\*

1.These are inbult given by python libraries

2. These keywords are used in various actions

8A) Data types available in python are:

1. Int , string ,float ,Boolean,list,arrays,tuple etc

9A) a = 20

If a == 20 :

Print (“It is equal to 20”)

10): Purpose of elif statement

1. In order to satisfy many conditions and print statements we use elif

2. As a default statement we have finally a elif statement .If all the conditions are failed the default statement is executed