AIM:- To understand the Concept of machine learning and basic programming of python.

THEORY:-

1) What is Machine Learning?

Machine learning is a branch of artificial intelligence (AI) and computer science which focuses on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy.

IBM has a rich history with machine learning. One of its own, Arthur Samuel, is credited for coining the term, "machine learning" with his research (PDF, 481 KB) (link resides outside IBM) around the game of checkers. Robert Nealey, the self-proclaimed checkers master, played the game on an IBM 7094 computer in 1962, and he lost to the computer. Compared to what can be done today, this feat seems trivial, but it's considered a major milestone in the field of artificial intelligence.

2) difference between the types of Machine Learning?

Based on the methods and way of learning, machine learning is divided into mainly four types, which are:

- Supervised Machine Learning
- Unsupervised Machine Learning
- Reinforcement Learning

3) What are the application of Machine Learning?

Machine learning is a buzzword for today's technology, and it is growing very rapidly day by day. We are using machine learning in our daily life even without knowing it such as Google Maps, Google assistant, Alexa, etc. Below are some most trending real-world applications of Machine Learning:

- Traffic Alerts
- Social Media
- Transportation and Commuting
- Products Recommendations
- Virtual Personal Assistants
- Self Driving Cars
- Dynamic Pricing
- Google Translate
- Online Video Streaming
- Fraud Detection

4) Which are the topmost industries works on machine learning?

5) Difference between machine learning, Artificial Intelligence and data Science?

6) What is python?

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics developed by Guido van Rossum. It was originally released in 1991.

7) What are the advantages of using python?

- Large developer community.
- Extensive libraries.
- Write less, do more. Python has very concise syntax.
- Portability.
- Wide range of use cases.

8) what are different IDE's for python?

pyCharm

9) What are modules and libraries used in python for machine learning?

Python libraries that are used in Machine Learning are:

- Numpy
- Scipy
- Scikit-learn
- Theano

- TensorFlow
- Keras
- PyTorch
- Pandas
- Matplotlib

Python modules::

DevOps(Live)

Data Structure & Algorithm Classes (Live)

System Design (Live)

Java Backend Developer (Live)

Full Stack Development with React & Node JS (Live)

Complete Data Science Program.

Data Structure & Algorithm-Self Paced(C++/JAVA)

Data Structures & Algorithms in Python.