\*IOT Introduction

-->The internet of things, or IoT, is a system of interrelated computing devices, mechanical and digital machines, objects,

animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without

requiring human-to-human or human-to-computer interaction.

-->A network of physical objects

-->That colects and exchange data

-->Built for specific purpose

\*Evolved and enhanced with the advent of multiple technologies:

->Wireless Communication

->Embedded Systems

->Real-time analytics

->Cloud Computing

-> AI, ML

-->We learned about MQTT Broker

->First after installing mqtt in linux,

we checked that mqtt is proprely installed or not. for that we run one command

netstat -ltn (If there is a port no 1883 is running it is successfdully installed.)

-> We can simply publish and subscribe the messages to the particular topic like this.

- mosquitto\_pub -t "iot/topic1" -m "hello Iot"

- mosquitto\_sub "iot/topic1"

19/04/2022

--> We learned to install mondodb and the use and structure of mogo database.

19 April 2022

What is MongoDB

* + Introduction to MongoDB
  + Advantages of MongoDB
  + Different Terms of MongoDB like database, collections, documents.
  + MongoDB CLI commands like Show dbs

Use <database\_name>

Show collections db[‘<collection\_name>’].find() db[‘<collection\_name>’].drop()

* + Changed the port number for MQTT
  + MongoDB Compass
  + Created a new database in MongoDB compass GUI
  + Performed exercise on Mosquitto PUB & Mosquitto SUB
  + Created Config\_sub.json and Subscriber.py files to perform that task

Topic: IOT

Install MongoDB in ubuntu Functionality of MongoDB Connect MongoDB to the MQTT

Date : 20/04/2022

Topic: IOT Install curl Install code-red Use of code-red

connect code-red with MQTT using pub and sub

Date : 21/04/2022

Topic: IOT

What is cloud computing Type of cloud

How to create IOT Hub on Azure

Device To Cloud & Cloud To Device Message Transfer

Date : 25/04/2022

Topic: IOT

Device and Device Provisioning Provisioning Process Registration vs Provisioning

Features of the Device Provisioning Services (DPS) X.509