Assignment 1:- Use cases of IoT

- **Asset management**:- IoT is widely used for Enterprise asset management. Scheduling, Maintenance, Planning, work Management, Health, and safety are some of the roles of IoT. In recent trends, businesses are moving rapidly in IoT and sensors and hence businesses are adopting smart asset management to increase operational functionality and other major benefits.

- **Machine Maintenance:-** Maintenance is needed in every perspective. Some components are not checked regularly and hence IoT is needed. It will help in overall efficiency.

- **Process Automation:-** Industries put records of Different machines by the use of IoT and hence the manufacturers use different workflow and can reduce human power for the same.

- **Energy management:-** The need for increased energy is very important. And also Energy is the input in industries and hence it is needed to manage them. IoT plays a very crucial role through its models and learning. It will help drastically in energy savings.

- **Outdoor Surveillance:**- Government needs outdoor CCTV data and other major security concerns need to be adopted by the individuals and government. IoT hence plays an important role for the same.

- **Smart Lighting:**- We all know that a large amount of Light is wasted because of the irregularity from the human side. Hence Automotive IoT lighting is required. Data fetched from previous records and other major inputs help to achieve the target.

- **Smart parking:-** In cities like New Delhi, Mumbai and others, Parking is a major problem. In general, sensors are attached and hence measurements are periodically taken to the cloud by the microprocessor.

- **Noise Monitoring:-** Monitoring noise can also be done by the use of the Internet of things. This can help in warning the companies of the irregularities made.

- **Health Monitoring:-** Health monitoring is a very important task and hence IOT is used in the same. It can record vibrations and other input in the regularity made.

- **Waste Management:-** Waste Management can be automated as we move from traditional methods to IoT leading from the savior of our mother earth.

- **Water Conservation:-** Sensors from IOT detect the water level and once it is crossed the mainline then it will automatically turn off the motor.

- **Smart Irrigation:-** Water loss in irrigation is very important and hence IOT is required in the field.

- **Leakage management:-** If any leakage in the laboratory or at another place occurs then IoT applications can detect it. In general it is not seen by the common human.

- **Water Quality Management:-** Water quality management is done by the use of IOT and hence it is very important. TDS, bacteria, ppms can be checked easily with the help of the software.

- **UltraViolent Radiation monitor:**- IOT system helps the users not to be in the presence of sunlight so that they can be prevented from sunlight.

- **Medical Fridge:-** IOT will help to regulate the temperature of the fridge with the help of sensors so that the required temperature for special medicines are taken care of.

- **Remote Patient Monitoring:-** Remote patient monitoring is very necessary. It helps the patients to control and monitor after they are having surgery and needs to be monitored

- **Supply chain control:-** Supply chain is very critical for manufacturers and industries. Sensors, Gps and other material help them to get the maximum benefit.

- **Near field communication:-** NFC payments are used for the payments without the needs of contact.

- **Smart Homes:**- smart homes are used to get the majority of the luxury and comfort in one go. Different components are used for a smart home and hence it is used widely now.