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**Project Name**  : Serverless IOT data processing

**INTRODUCTION :**

Application have gained massive popularity in recent times. IoT network comp smart and connected objects called “things”. Things communicate with Each other without any human intervention and generate a significant amount of data. Things are heterogeneous and build a dynamic infrastructure. IoT devices have already outreached the human population and are expected to cross the number of 500 billion by 2030. IoT devices differ in architecture sensing capabilities and other aspects such as memory and power. IoT Network is dynamic as devices are deployed in a frequently changing environment. Furthermore, IoT devices are resources constrained as they are often Deployed with limited memory, power and processing capability.

**Problem Statement:**

Cloud computing and IoT devices are characterized by contrasting characteristics .For instance, IoT devices work with limited capabilities whereas the cloud provides an illusion of infinite resources. Cloud computing provides the required resources to the IoT network. Due to the limitations of IoT devices, generated data is offloaded to cloud-based resources for further processing, and the cloud sends the results back upon processing the data.

IoT devices in conjunction with cloud resources perform efficient data processing. However, such solution has the following limitations:

• High latency: Offloading a small task to the cloud scenario relatively more time than processing it locally at the IoT device.

• Privacy concerns: Some tasks need more privacy, which makes it infeasible to offload their processing to the cloud.

• Support for mobility: In case of non-stationary sensing devices, it may be possible to offload processing data to the cloud. In such a , a sensor should be able to process it locally.

**Methodology:**

