**Compare fog computing to cloud computing, then comment what is better for the IoT Application?**

|  |  |  |
| --- | --- | --- |
|  | Cloud computing | Fog computing |
| Definition | Cloud computing is the on-demand provision of computer processing power, data storage, and applications available over the internet, it is dependent on centralized data centers. | Fog computing is a more decentralized form of cloud computing whereby the computing technology is between a cloud and a data source or another data center. |
| Location of Service | In cloud computing data processing and storage happen on remote servers. | Services are offered at the edge of the local network in fog computing. |
| Delay | has a higher latency level as compared to fog computing | Fog computing experiences low latency |
| Communication Mode | only works with the user’s IP Network | supports wireless communication or wired communication |
| Security | When compared to fog computing, cloud computing has a low level of security. | Fog computing’s security level is high |

We recommend Fog Computing for IoT Applications as its Low Latency, Enhanced Security and Privacy and Reliability as it can work either in a weak or strong network core.

**What is enum data type is used for?**

Enumeration (or enum) is a user defined data type in C. enum keyword followed by a name and a list of named integer constants.

Use cases:

1. A computer screen with text

   Description automatically generated with medium confidenceTo Represent a Set of Options or States in the Form of Integers

A black background with white text

Description automatically generated

Output:

1. A computer screen shot of a program code

   Description automatically generatedRepresent Error Codes

A black background with white text

Description automatically generated

Output:

1. A screen shot of a computer code

   Description automatically generatedImprove Type Safety  
   It prevents accidental assignment of invalid values to the variable.

A screen shot of a computer

Description automatically generated

Output:

1. A screen shot of a computer program

   Description automatically generatedSwitch Statements

A black background with white text

Description automatically generatedOutput: