**Tabular Model Introduction:**

Tabular models in Analysis Services are databases that run in-memory or in DirectQuery mode, connecting to data directly from back-end relational data sources. By using state-of-the-art compression algorithms and multi-threaded query processor, the Analysis Services Vertipaq analytics engine delivers fast access to tabular model objects and data by reporting client applications like Power BI and Excel.

While in-memory models are the default, DirectQuery is an alternative query mode for models that are either too large to fit in memory, or when data volatility precludes a reasonable processing strategy. DirectQuery achieves parity with in-memory models through support for a wide array of data sources, ability to handle calculated tables and columns in a DirectQuery model, row level security via DAX expressions that reach the back-end database, and query optimizations that result in faster throughput.

**Azure Analysis Services Introduction:**

Azure Analysis Services is a fully managed platform as a service (PaaS) that provides enterprise-grade data models in the cloud. Use advanced mashup and modeling features to combine data from multiple data sources, define metrics, and secure your data in a single, trusted tabular semantic data model. The data model provides an easier and faster way for users to browse massive amounts of data for ad-hoc data analysis.