# Singleton design pattern

Singleton Pattern says that just**"define a class that has only one instance and provides a global point of access to it".**

In other words, a class must ensure that only single instance should be created and single object can be used by all other classes.

There are two forms of singleton design pattern

* **Early Instantiation:** creation of instance at load time.
* **Lazy Instantiation:** creation of instance when required.

Advantage of Singleton design pattern

* Saves memory because object is not created at each request. Only single instance is reused again and again

Usage of Singleton design pattern

* Singleton pattern is mostly used in multi-threaded and database applications. It is used in logging, caching, thread pools, configuration settings etc.