**Abstraction**

**What?**

Data abstraction refers to providing only essential information to the outside world and hiding their background details, i.e., to represent the needed information in program without presenting the details.

Data abstraction is a programming (and design) technique that relies on the separation of interface and implementation.

**Why?**

Abstraction provides some advantages,

Classes internals are protected from user level errors, which corrupt the state of the object.

**How?**

The abstraction can be achieved by the following ways,

1. Abstraction using classes.

Done with the help of the accessn specifiers. Putting the members of a class in private and making them not to be accessed by outside member.

2. Abstraction in header files.

The implementation is defined in the header file and we just need to include that header file to our program to execute the method that is obtained from it. So hiding the implementations.

Advantages of Data Abstraction:

* Helps the user to avoid writing the low level code
* Avoids code duplication and increases reusability.
* Can change internal implementation of class independently without affecting the user.
* Helps to increase security of an application or program as only important details are provided to the user.