**Encapsulation in java** is a *process of wrapping code and data together into a single unit*, for example capsule i.e. mixed of several medicines.



We can create a fully encapsulated class in java by making all the data members of the class private. Now we can use setter and getter methods to set and get the data in it.

**Advantage of Encapsulation in java**

By providing only setter or getter method, you can make the class **read-only or write-only**.

It provides you the **control over the data**. Suppose you want to set the value of id i.e. greater than 100 only, you can write the logic inside the setter method.

Simple example of encapsulation in java

Let's see the simple example of encapsulation that has only one field with its setter and getter methods.

//save as Student.java

**package** com.java

**class** Student

{

**private** String name;  //instance var

**public** **void** setName(String name) //i/p

{

**this**.name=name

}

**public** String getName() //show

{

**return** name;

}

}

//save as Test.java

**package** com.javat;

**public class** Test{

**public** **static** **void** main(String[] args){

Student s1=**new** Student();

S1.setname("ABC");

System.out.println(s1.getName());

Student s2=new Student();

s2.setname(“PQR”) ;

System.out.println(s2.getName());

}  }

Compile By: javac.Test.java

Output: ABC