

Assignment

1. what is the encapsulation in java why is called data hiding

ANS: Encapsulation in Java refers to integrating data (variables) and code (methods) into a single unit. In encapsulation, a class's variables are hidden from other classes and can only be accessed by the methods of the class in which they are found.

2. what are the important features of encapsulation in java

ANS: A class can have complete control over its data members and data methods. The class will maintain its data members and methods as read-only. Data hiding prevents the user from the complex implementations in the code.

3. what are the getter and setter method in java explain with example

ANS: Getters and setters are used to protect your data, particularly when creating classes. For each instance variable, a getter method returns its value while a setter method sets or updates its value. Given this, getters and setters are also known as accessors and mutators, respectively.

4. what is the use of this keyword explain with an example

ANS: This keyword refers to the current object in a method or constructor. The most common use of this keyword is to eliminate the confusion between class attributes and parameters with the same name (because a class attribute is shadowed by a method or constructor parameter).

5. what is the advantages of encapsulation in java

ANS: The class will maintain its data members and methods as read-only. Data hiding prevents the user from the complex implementations in the code. The variables of the class can be read-only or write-only as per the programmer's requirement.

6. how to achieve encapsulation in java give an example

ANS: To calculate an area, we need two variables: length and breadth and a method: get Area() . Hence, we bundled these fields and methods inside a single class. Here, the fields and methods can be accessed from other classes as well. Hence, this is not data hiding.