**Q4.** Assume that a program contains one method to set the random location of the unmanned vehicle and two getter methods to retrieve the accurate location value in relevant units. Please justify which java concept is used in the above sample program.

**Ans:**

In the given question, a setter method is present in the program to set the value of the current location of the unmanned vehicle. Similarly, a getter method is used to get the value of the member variables used to store the location of the vehicle. Hence, a combination of class members is used, that is, member variables are used to store certain data and member functions are used to operate or manipulate on this data. Although in this program, there is no modification in the data, the member methods are only used to input the values and display the values only. This shows that the class members (attributes and associated methods) are bound or wrapped together into a single unit (called class) and therefore the Java concept used here is Encapsulation.

Apart from this, the concept of Abstraction also may have been used if the member variables are declared using the private access specifier. These members will not be visible to any entity outside the class it is declared in, which is why there are separate setter and getter functions to input and display data respectively.