Encapsulation
Assignment Questions

1->What is encapsulation in Java? Why is it called Data Hiding?
Encapsulation in Java is the process by which data (variable) and code that acts upon them (methods) are integrated as a single unit.

In encapsulation, the variable of a class will be hidden from the other classes, and can be accessed only through the methods of their current class.Therefore, it is known as Data Hiding

2-> What are the important features of encapsulation?
Features of encapsulation:-
A > A class can have complete control over its data members and data methods.
B >The class will maintain its data members and methods as read-only.
C > Data Hiding prevents the user from the complex implementation in the code.

3-> What are getter and Setter methods in java explain with examples?
Glitters 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.

Example:-

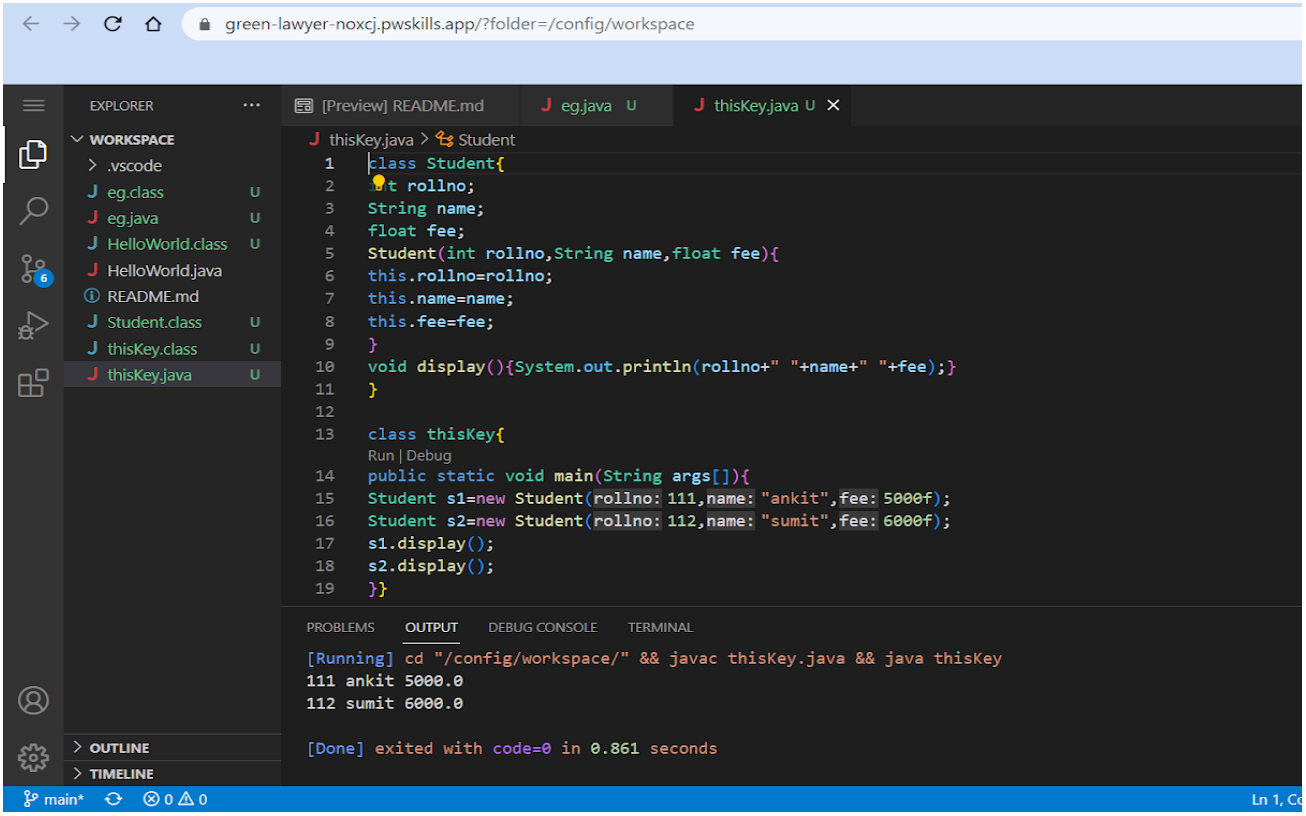
```
public class Demo{

  private String color;
                                  // Getter
  public String getColor() {
    return color;
  }
                                        // Setter
  public void setColor(String c) {
    this.color = c;
  }
}
```

4->What is the use of this keyword explain with an example?

The ‘this’ keyword refers to the current object in a method or constructor. the most common use of the ‘this’ keyword is to eliminate the confusion between class attributes and parameters with the same name .

Example:-



5-> What is the advantage of encapsulation?

Advantage of encapsulation in Java:- the class will be maintain its data members and methods as read-only. Data Hiding prevents the user from the complete implementation in the code. the variable of class can be read only or write only as per the programmer’s requirement.

6-> How to achieve encapsulation in Java? Give an example?

Encapsulation in Java is a process of wrapping code and data together into a single unit .

For example, we can create a fully encapsulated class in Java by making all the data(Variables) members of the class private.

Note:- Please create a Google Document and write your answers and upload the shareable link of the Google Document with view access during the submission of the assignmentL