Project-4:

```
Question 1:
// ComputeMethods.java
public class ComputeMethods {
  // Method to convert Fahrenheit to Celsius
  public double fToC(double degreesF) {
    double celsius = (degreesF - 32) * 5.0 / 9.0;
    return celsius;
  }
  // Method to calculate the hypotenuse of a right-angled triangle
  public double hypotenuse(int a, int b) {
    double hypotenuse = Math.sqrt(a * a + b * b);
    return hypotenuse;
  }
  // Method to simulate rolling a six-sided die
  public int roll() {
    int dieRoll = (int) (Math.random() * 6) + 1;
    return dieRoll;
  }
  // Main method for testing purposes
  public static void main(String[] args) {
    // Create an instance of ComputeMethods
    ComputeMethods cm = new ComputeMethods();
    // Invoke the fToC method and display the result
    double tempF = 100.0;
    double tempC = cm.fToC(tempF);
    System.out.println("Temperature in Celsius: " + tempC);
    // Invoke the hypotenuse method and display the result
    int sideA = 3;
    int sideB = 4;
```

```
double hypotenuse = cm.hypotenuse(sideA, sideB);
        System.out.println("Hypotenuse: " + hypotenuse);
        // Invoke the roll method and display the result
        int rollResult = cm.roll();
        System.out.println("Rolled a die: " + rollResult);
    }
}
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   Dependencies
Java Dependencies
Project Files
                                                                     // Main method for testing purposes
public static void main(String[] args) [
  gunasriproject1
Source Packages
                                                                       ComputeMethods cm = new ComputeMethods();
   // Invoke the fToC method and display the result
double tempF = 100.0;
double tempC = cm.fToC(tempF);
                                                                         System.out.println("Temperature in Celsius: " + tempC);
                                                                         int sideA = 3;
int sideB = 4;
                                                                         double hypotenuse = cm.hypotenuse(sideA, sideB);
System.out.println("Hypotenuse: " + hypotenuse);
  JAVALIBSPRACTICE
                                                                         // Invoke the roll method and display the result
main - Navigator ×
                                                                         int rollResult = cm.roll();
System.out.println("Rolled a die: " + rollResult);
 ♠ ComputeMethods

    ComputeMethods()
    Floc(double degreesF): double
    hypotenuse(int a, int b): double
                                                          Output-Run (ComputeMethods) X

Changes detected - recompiling the module! :source

Compiling 1 source file with javac [debug target 22] to target\classes
main(String[] args)
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Temperature in Celsius: 37.7777777777778
                                                           Q
                                                                Rolled a die: 5
                                                           93
99
                                                                BUILD SUCCESS
                                                                Total time: 3.005 s
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```

Question 2:

```
public class ProcessName {
  public static void main(String[] args) {
    // Hardcoded name for demonstration
    String fullName = "Jenny Weaver";

  // Extract the first and last name
  String[] nameParts = fullName.split(" ");
  String firstName = nameParts[0];
```

```
String lastName = nameParts[1];
      // Get the first initial of the first name
      String firstInitial = firstName.substring(0, 1);
      // Display the name in the specified format
      System.out.println("Your name is: " + lastName + ", " + firstInitial + ".");
  }
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Projects × Files Services
                                                      JAVALIBSPRACTICE.java × A Progg.java × ComputeMethods.java ×
    ComputeMethods.java
                                                       public static void main(String[] args) {
   Dependencies
    Java Dependencies
                                                             String fullName = "Java Programming";
    Project Files
 gunasriproject1
Source Packages
<fr>
<hr/>default package>
                                                                    String[] nameParts = fullName.split(" ");
String firstName = nameParts[0];
String lastName = nameParts[1];
                                                       21
22
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    <aerault packages</p>

    <a>PROJECT3_0.java

    <a>project2_1.java

    <a>project3.java

    <a>com.mycompany.gunasriproject1

                                                                    // Get the first initial of the first name
String firstInitial = firstName.substring(0, 1);
        Gunasriproject1.java
gunasri.java
  > Test Packages
                                                                     // Display the name in the specified format
                                                       29
30
                                                                     System.out.println("Your name is: " + lastName + ", " + firstInitial + ".");
   Java Dependencies
                                                       31
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    Project Files
main - Navigator ×
 ComputeMethods()
                                                       Output - Run (ComputeMethods) ×
  main(String[] args)
                                                            --- compiler:3.11.0:compile (default-compile) @ Co
                                                            Compiling 1 source file with javac [debug target 22] to target\classes
                                                      Your name is: Programming, J.
                                                             --- exec:3.1.0:exec (default-cli) @ ComputeMethods
                                                            BUILD SUCCESS
                                                            Total time: 2.864 s
                                                            Finished at: 2024-07-27T13:53:10+05:30
```