Q1.

Code:

|  |
| --- |
| ***import javax.swing.\*;***  ***public class JavaWelcomeApp {***  ***public static void main(String[] args) {***  ***// Create a JFrame object***  ***JFrame javaFrame = new JFrame("Java Welcome Screen");***  ***// Set frame size to 800x600 pixels***  ***javaFrame.setSize(800, 600);***  ***// Set the default close operation***  ***javaFrame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);***  ***// Make the frame visible***  ***javaFrame.setVisible(true);***  ***}***  ***}*** |

Output:

A screenshot of a computer

AI-generated content may be incorrect.

Q2.

Code:

|  |
| --- |
| ***import javax.swing.\*; import java.util.Scanner;  public class UserNameDisplay {  public static void main(String[] args) {  // Create Scanner object for user input  Scanner inputScanner = new Scanner(System.in);   // Ask the user for their first and last name  System.out.print("Enter your first name: ");  String firstNameInput = inputScanner.nextLine();   System.out.print("Enter your last name: ");  String lastNameInput = inputScanner.nextLine();   // Combine first and last name  String completeName = firstNameInput + " " + lastNameInput;   // Close the scanner  inputScanner.close();   // Ensure GUI updates happen on the Event Dispatch Thread (EDT)  SwingUtilities.invokeLater(() -> {  // Create JFrame with the user's full name as the title  JFrame nameFrame = new JFrame(completeName);   // Set frame size  nameFrame.setSize(400, 300);   // Set the default close operation  nameFrame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);   // Make the frame visible  nameFrame.setVisible(true);  });  } }*** |

Output:

A screenshot of a computer

AI-generated content may be incorrect.

Q3

Code:

|  |
| --- |
| ***import java.util.Scanner;***  ***public class FullNameInitials {***  ***public static void main(String[] args) {***  ***Scanner userInputScanner = new Scanner(System.in);***  ***System.out.print("Enter your first name: ");***  ***String firstName = userInputScanner.nextLine();***  ***System.out.print("Enter your second name: ");***  ***String secondName = userInputScanner.nextLine();***  ***System.out.print("Enter your last name: ");***  ***String lastName = userInputScanner.nextLine();***  ***String secondNameInitial = secondName.charAt(0) + ".";***  ***System.out.println("Formatted Name: " + firstName + " " + secondNameInitial + " " + lastName);***  ***userInputScanner.close();***  ***}***  ***}*** |

A screen shot of a computer

AI-generated content may be incorrect.

Q4.

Code:

|  |
| --- |
| ***import java.time.LocalDate; import java.time.format.DateTimeFormatter;  public class TodayDate {  public static void main(String[] args) {   LocalDate today = LocalDate.now();    DateTimeFormatter customDateFormatter = DateTimeFormatter.ofPattern("d MMM yyyy");    String formattedTodayDate = today.format(customDateFormatter);    System.out.println("Today's Date: " + formattedTodayDate);  } }*** |

Output:

A screen shot of a computer

AI-generated content may be incorrect.

Q5:

Code:

|  |
| --- |
| ***import java.time.LocalDate; import java.time.format.DateTimeFormatter; import java.util.Locale;  public class TodayFullDate {  public static void main(String[] args) {   LocalDate todayDate = LocalDate.now();    DateTimeFormatter fullDateFormatter = DateTimeFormatter.ofPattern("EEEE, MMMM d, yyyy", Locale.ENGLISH);    String formattedTodayDate = todayDate.format(fullDateFormatter);  System.out.println(formattedTodayDate);  } }*** |

Output:

A screen shot of a computer

AI-generated content may be incorrect.

Q6:

Code:

|  |
| --- |
| ***import javax.swing.\*; import java.util.Scanner;  public class GUIWindow {  public static void main(String[] args) {   Scanner userInput = new Scanner(System.in);    System.out.print("Enter the title of the window: ");  String title = userInput.nextLine();   System.out.print("Enter the width of the window: ");  int width = userInput.nextInt();   System.out.print("Enter the height of the window: ");  int height = userInput.nextInt();    userInput.close();    JFrame appWindow = new JFrame(title);  appWindow.setSize(width, height);  appWindow.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);  appWindow.setVisible(true);  } }*** |

Output:

Q7:

Code:

|  |
| --- |
| ***mport javax.swing.\*; import java.text.SimpleDateFormat; import java.util.Date; import java.util.Timer; import java.util.TimerTask;  public class ClockWindow {  public static void main(String[] args) {   JFrame clockFrame = new JFrame();  clockFrame.setSize(400, 200);  clockFrame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);  clockFrame.setVisible(true);    Timer clockTimer = new Timer(true);  clockTimer.scheduleAtFixedRate(new TimerTask() {  @Override  public void run() {   String currentTime = new SimpleDateFormat("hh:mm:ss a").format(new Date());  clockFrame.setTitle(currentTime);  }  }, 0, 1000); // Update every second  } }*** |

Output:

A screenshot of a computer

AI-generated content may be incorrect.

Q8:

Code:

|  |
| --- |
| ***import java.util.Scanner;  public class ExclamationSplitter {  public static void main(String[] args) {   Scanner inputScanner = new Scanner(System.in);    System.out.print("Enter a string containing a single exclamation mark (!): ");  String inputString = inputScanner.nextLine();    inputScanner.close();    int exclamationPosition = inputString.indexOf('!');    if (exclamationPosition == -1 || inputString.indexOf('!', exclamationPosition + 1) != -1) {  System.out.println("Error: The input must contain exactly one exclamation mark.");  return;  }    String partBefore = inputString.substring(0, exclamationPosition).trim();  String partAfter = inputString.substring(exclamationPosition + 1).trim();    System.out.println(partBefore);  System.out.println(partAfter);  } }*** |

Output:

A screen shot of a computer

AI-generated content may be incorrect.

Q9:

Code:

|  |
| --- |
| ***import java.util.Scanner;  public class TextAnalyzer {  public static void main(String[] args) {   Scanner userInputScanner = new Scanner(System.in);    System.out.print("Enter a text: ");  String userText = userInputScanner.nextLine();    userInputScanner.close();    int textLength = userText.length();    if (textLength > 0) {  char firstChar = userText.charAt(0);  char lastChar = userText.charAt(textLength - 1);   // Display output  System.out.println(textLength);  System.out.println(firstChar);  System.out.println(lastChar);  } else {  System.out.println("Error: No text entered.");  }  } }*** |

Output:

A screen shot of a computer

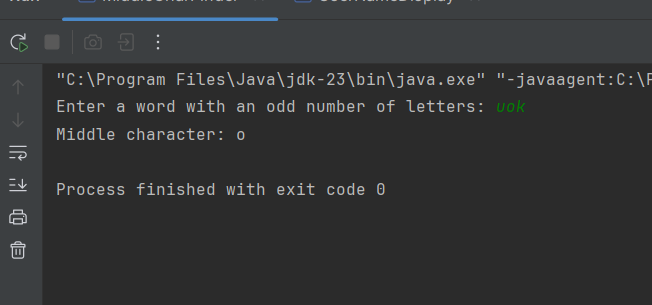
AI-generated content may be incorrect.

Q10:

Code:

|  |
| --- |
| ***import java.util.Scanner;  public class MiddleCharFinder {  public static void main(String[] args) {  // Create Scanner object  Scanner userInputScanner = new Scanner(System.in);   // Prompt user for input  System.out.print("Enter a word with an odd number of letters: ");  String userWord = userInputScanner.nextLine();   // Close the scanner  userInputScanner.close();   // Get the length of the word  int wordSize = userWord.length();   // Check if the word has an odd length  if (wordSize % 2 == 1) {  int centerIndex = wordSize / 2; // Calculate middle index  char centerChar = userWord.charAt(centerIndex); // Get middle character   // Display output  System.out.println("Middle character: " + centerChar);  } else {  System.out.println("Error: The word must contain an odd number of letters.");  }  } }*** |

Output:



Q11:

Code:

|  |
| --- |
| ***import java.util.Scanner;  public class NameFormatter {  public static void main(String[] args) {   Scanner inputScanner = new Scanner(System.in);    System.out.print("Enter your full name (First Middle Last): ");  String fullName = inputScanner.nextLine();    inputScanner.close();    String[] nameParts = fullName.split(" ");   // Check if there are exactly three parts (First, Middle, Last)  if (nameParts.length == 3) {  String first = nameParts[0];  String middle = nameParts[1];  String last = nameParts[2];   // Get the middle initial  char middleInitial = middle.charAt(0);   // Format and display the output  System.out.println(last + ", " + first + " " + middleInitial + ".");  } else {  System.out.println("Error: Please enter your name in the format 'First Middle Last'.");  }  } }*** |

Output:

A screen shot of a computer program

AI-generated content may be incorrect.

Q12:

Code:

|  |
| --- |
| ***import javax.swing.JFrame;  public class SimpleWindow {  public static void main(String[] args) {   JFrame appFrame = new JFrame("My First GUI");    appFrame.setSize(300, 200);    appFrame.setLocation(100, 50);    appFrame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);    appFrame.setVisible(true);  } }*** |

Output:

