01)

import javax.swing.\*;

public class Welcome\_to\_Java {

public static void main(String[] args) {

JFrame frame = new JFrame("Welcome to Java");

frame.setSize(800, 600);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setVisible(true);

}

}

A screenshot of a computer

AI-generated content may be incorrect.

02)

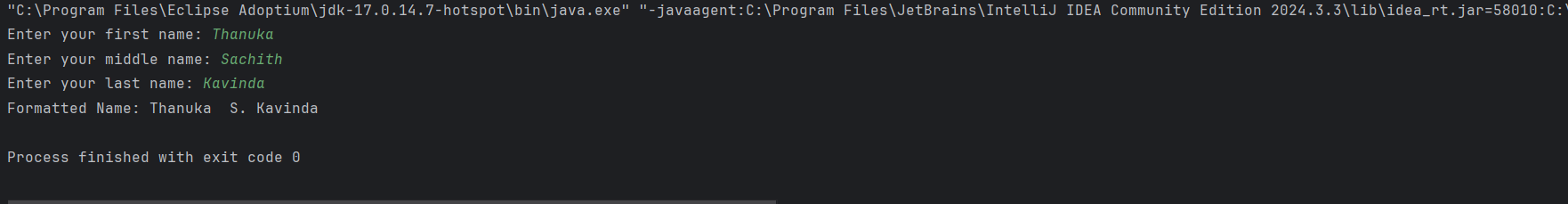
import javax.swing.\*;  
import java.util.Scanner;  
  
public class Name {  
 public static void main(String[] args) {  
  
 Scanner scanner = new Scanner(System.*in*);  
  
  
 System.*out*.print("Enter your first name: ");  
 String firstName = scanner.nextLine();  
  
 System.*out*.print("Enter your last name: ");  
 String lastName = scanner.nextLine();  
  
 String fullName = firstName + " " + lastName;  
  
 scanner.close();  
  
 SwingUtilities.*invokeLater*(() -> {  
  
 JFrame frame = new JFrame(fullName);  
 frame.setSize(400, 300);  
 frame.setDefaultCloseOperation(JFrame.*EXIT\_ON\_CLOSE*);  
 frame.setVisible(true);  
 });  
 }  
}

A screenshot of a computer

AI-generated content may be incorrect.

03)

import java.util.Scanner;  
  
public class Name\_with\_initials {  
 public static void main(String[] args) {  
 Scanner scanner = new Scanner(System.*in*);  
  
 System.*out*.print("Enter your first name: ");  
 String firstName = scanner.nextLine();  
  
 System.*out*.print("Enter your middle name: ");  
 String middleName = scanner.nextLine();  
  
 System.*out*.print("Enter your last name: ");  
 String lastName = scanner.nextLine();  
 String middleInitial = middleName.charAt(0) + ".";  
  
 System.*out*.println("Formatted Name: " + firstName + " " + middleInitial + " " + lastName);  
  
  
 scanner.close();  
 }  
}



04)

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

A black screen with white and blue lights

AI-generated content may be incorrect.

05)

import java.time.LocalDate;  
import java.time.format.DateTimeFormatter;  
import java.util.Locale;  
  
public class Date {  
 public static void main(String[] args) {  
  
 LocalDate today = LocalDate.*now*();  
  
 DateTimeFormatter formatter = DateTimeFormatter.*ofPattern*("EEEE, MMMM d, yyyy", Locale.*ENGLISH*);  
 String formattedDate = today.format(formatter);  
 System.*out*.println(formattedDate);  
 }  
}

A black screen with a black background

AI-generated content may be incorrect.

06)

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

A screenshot of a computer program

AI-generated content may be incorrect.

07)

import javax.swing.\*;  
import java.text.SimpleDateFormat;  
import java.util.Date;  
import java.util.TimeZone;  
import java.util.Timer;  
import java.util.TimerTask;  
  
public class Current\_time {  
 public static void main(String[] args) {  
 JFrame frame = new JFrame();  
 frame.setSize(400, 200);  
 frame.setDefaultCloseOperation(JFrame.*EXIT\_ON\_CLOSE*);  
 frame.setVisible(true);  
  
 Timer timer = new Timer(true);  
 timer.scheduleAtFixedRate(new TimerTask() {  
 @Override  
 public void run() {  
 String time = new SimpleDateFormat("hh:mm:ss a").format(new Date());  
 frame.setTitle(time);  
 }  
 }, 0, 1000); // Update every second  
 }  
}A screenshot of a computer

AI-generated content may be incorrect.

08)  
import java.util.Scanner;  
  
public class Split {  
 public static void main(String[] args) {  
 Scanner scanner = new Scanner(System.*in*);  
  
 System.*out*.print("Enter a string containing a single exclamation mark (!): ");  
 String input = scanner.nextLine();  
  
 scanner.close();  
  
 int index = input.indexOf('!');  
  
 if (index == -1 || input.indexOf('!', index + 1) != -1) {  
 System.*out*.println("Error: The input must contain exactly one exclamation mark.");  
 return;  
 }  
  
 String before = input.substring(0, index).trim();  
 String after = input.substring(index + 1).trim();  
  
 System.*out*.println(before);  
 System.*out*.println(after);  
 }  
}

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AI-generated content may be incorrect.

09)

import java.util.Scanner;  
  
public class String\_details {  
 public static void main(String[] args) {  
 Scanner scanner = new Scanner(System.*in*);  
  
 System.*out*.print("Enter a string: ");  
 String input = scanner.nextLine();  
  
 scanner.close();  
  
 int length = input.length();  
  
 if (length > 0) {  
 char firstChar = input.charAt(0);  
 char lastChar = input.charAt(length - 1);  
  
 System.*out*.println(length);  
 System.*out*.println(firstChar);  
 System.*out*.println(lastChar);  
 } else {  
 System.*out*.println("Error: Empty string entered.");  
 }  
 }  
}

A black screen with a black background

AI-generated content may be incorrect.

10)

import java.util.Scanner;  
  
public class Middle\_character {  
 public static void main(String[] args) {  
 Scanner scanner = new Scanner(System.*in*);  
  
 System.*out*.print("Enter an odd-length word: ");  
 String input = scanner.nextLine();  
 scanner.close();  
 int length = input.length();  
 if (length % 2 == 1) {  
 int middleIndex = length / 2; // Calculate middle index  
 char middleChar = input.charAt(middleIndex); // Get middle character  
  
 System.*out*.println("Middle character: " + middleChar);  
 } else {  
 System.*out*.println("Error: The word must have an odd number of characters.");  
 }  
 }  
}

A black screen with white and blue lights

AI-generated content may be incorrect.

11)

import java.util.Scanner;  
  
public class Name\_format {  
 public static void main(String[] args) {  
 Scanner scanner = new Scanner(System.*in*);  
  
 System.*out*.print("Enter your full name (First Middle Last): ");  
 String fullName = scanner.nextLine();  
 scanner.close();  
  
 String[] nameParts = fullName.split(" ");  
 if (nameParts.length == 3) {  
 String firstName = nameParts[0];  
 String middleName = nameParts[1];  
 String lastName = nameParts[2];  
 char middleInitial = middleName.charAt(0);

System.*out*.println(lastName + ", " + firstName + " " + middleInitial + ".");  
 } else {  
 System.*out*.println("Error: Please enter your name in the format 'First Middle Last'.");  
 }  
 }  
}A black screen with a black background

AI-generated content may be incorrect.

12)

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

