**ID: hrajranj**

**Day 7 – 4th June 2025**

**Task 1:**

Create a code to display

“Hello guys!!!! “

“We are learning Java”

Using a single output statement…

**Answer:**

public class Task1 {

    public static void main(String[] args) {

        System.out.println("Hello, World!");

    }

}

**Task 002:**

**Write a Program in Java to Add two Numbers.**

Input: 2 3

Output: 5

**Answer:**

mport java.util.Scanner;

public class Task2 {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        // Prompt the user

        System.out.print("Enter two numbers: ");

        int num1 = scanner.nextInt();

        int num2 = scanner.nextInt();

        int sum = num1 + num2;

        // Output the result

        System.out.println("Output: " + sum);

    }

}

**Task 003:**

**Write a Program to Swap Two Numbers**

Input: a=2 b=5

Output: a=5 b=2

**Answer:**

//Swapping two variables using a temporary variable

public class Task3 {

    public static void main(String[] args) {

        int a = 2;

        int b = 5;

        System.out.println("Before swapping: a = " + a + " b = " + b);

        // Swap using a temporary variable

        int temp = a;

        a = b;

        b = temp;

        System.out.println("After swapping: a = " + a + " b = " + b);

    }

}

**Task 004:**

**Create a code in which you have 4 methods add, subtract, multiply and divide (return type int) with a main method..to all all the other methods**

Out put:

Main started

Sum of 2 numbers is …..

Diff of 2 numbers is —-

Product of 2 numbers ….

Division of 2 numbers is ….

Main ended

**Answer:**

public class Task4 {

    // Method to add two integers

    public static int add(int a, int b) {

        return a + b;

    }

    // Method to subtract two integers

    public static int subtract(int a, int b) {

        return a - b;

    }

    // Method to multiply two integers

    public static int multiply(int a, int b) {

        return a \* b;

    }

    // Method to divide two integers

    public static int divide(int a, int b) {

        // Prevent division by zero

        if (b == 0) {

            System.out.println("Division by zero is not allowed.");

            return 0;

        }

        return a / b;

    }

    // Main method

    public static void main(String[] args) {

        System.out.println("Main started");

        int num1 = 20;

        int num2 = 4;

        System.out.println("Sum of 2 numbers is " + add(num1, num2));

        System.out.println("Diff of 2 numbers is " + subtract(num1, num2));

        System.out.println("Product of 2 numbers is " + multiply(num1, num2));

        System.out.println("Division of 2 numbers is " + divide(num1, num2));

        System.out.println("Main ended");

    }

}

**Task 005:**

**Write a program to check if a is greater or b.. Use ternary op**

**Answer:**

//comparing two numbers

public class Task5 {

    public static void main(String[] args) {

        int a = 10;

        int b = 7;

        // Using the ternary operator to check which is greater

        String result = (a > b) ? "a is greater than b" : "b is greater than or equal to a";

        System.out.println(result);

    }

}

**Task 006:**

**Write a program to take input from the user and display it to the user**

Input:

Id : Prasunamba

Pwd: 123456789

Output:

Hi ,

Your login id is Prasunamba

And your pwd is \*\*\*\*\*\*\*\*\*

HInt :

For scanner … import java.util.scanner;

Scanner sc = new Scanner(System.in);

Id = sc.nexLine();

**Answer:**

import java.util.Scanner;

public class Task6 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        // Taking input

        System.out.print("Enter your login id: ");

        String id = sc.nextLine();

        System.out.print("Enter your password: ");

        String pwd = sc.nextLine();

        // Masking password using asterisks

        String maskedPwd = "\*".repeat(pwd.length());

        // Displaying output

        System.out.println("\nHi ,");

        System.out.println("Your login id is " + id);

        System.out.println("And your pwd is " + maskedPwd);

    }

}

**Task 007:**

**Write a program to create a class named Customer**

**Call the customer class in Task007 class using an object**

**Answer:**// Define the Customer class

class Customer {

    void accept() {

        System.out.println("accept customer called");

    }

    void display() {

        System.out.println("display customer called");

    }

}

// Define the Task7 class with the main method

public class Task7 {

    public static void main(String[] args) {

        Customer cobj = new Customer();  // Create an object of Customer class

        cobj.accept();                   // Call the accept method

        cobj.display();                  // Call the display method

    }

}

**Task 008:**

**Wap to check the greater of 2 numbers**

**Ans:**

//Greater of Two Numbers

// This program takes two integers as input and prints the greater of the two numbers.

import java.util.Scanner;

public class Task8 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        // Input two numbers

        System.out.print("Enter first number: ");

        int num1 = sc.nextInt();

        System.out.print("Enter second number: ");

        int num2 = sc.nextInt();

        // Compare and print the greater number

        if (num1 > num2) {

            System.out.println(num1 + " is greater.");

        } else if (num2 > num1) {

            System.out.println(num2 + " is greater.");

        } else {

            System.out.println("Both numbers are equal.");

        }

        sc.close();

    }

}

**Task 009**

**Wap to check greater of 3 numbers**

Hint 👍

Use elseif

**Ans:**

//Greater of Three Numbers

// This program takes three integers as input and prints the greatest of the three numbers.

import java.util.Scanner;

public class Task9 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        // Input three numbers

        System.out.print("Enter first number: ");

        int num1 = sc.nextInt();

        System.out.print("Enter second number: ");

        int num2 = sc.nextInt();

        System.out.print("Enter third number: ");

        int num3 = sc.nextInt();

        // Compare and find the greatest number

         if (num1 >= num2 && num1 >= num3) {

            System.out.println(num1 + " is the greatest.");

        } else if (num2 >= num1 && num2 >= num3) {

            System.out.println(num2 + " is the greatest.");

        } else {

            System.out.println(num3 + " is the greatest.");

        }

        sc.close();

    }

}

**Task 010:**

**Wap to check if  week days**

1  ===> sunday

2 ===> monday

So on

8 and above ===> invalid input

Hint : use Switch case

**Ans:**

// Description: This program prompts the user to enter a number between 1 and 7 and prints the corresponding day of the week.

import java.util.Scanner;

public class Task10 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        while (true) {

            System.out.print("Enter a number (1 to 7): ");

            // Check if input is an integer

            if (sc.hasNextInt()) {

                int day = sc.nextInt();

                switch (day) {

                    case 1:

                        System.out.println("Sunday");

                        break;

                    case 2:

                        System.out.println("Monday");

                        break;

                    case 3:

                        System.out.println("Tuesday");

                        break;

                    case 4:

                        System.out.println("Wednesday");

                        break;

                    case 5:

                        System.out.println("Thursday");

                        break;

                    case 6:

                        System.out.println("Friday");

                        break;

                    case 7:

                        System.out.println("Saturday");

                        break;

                    default:

                        System.out.println("Invalid input. Please enter a number between 1 and 7.");

                        continue; // Go back to the beginning of the loop

                }

                break; // Exit loop if valid day number (1–7)

            } else {

                System.out.println("Invalid input. Please enter a valid number.");

                sc.next(); // Clear the invalid input

            }

        }

        sc.close();

    }

}

Task 011:

Wap to check loginid and password validation

Hint use while loop

Scanner sc = new Scanner(System.in);

String loginid = “Prasunamba”

String pwd = “12345867”

Int Count = 0;

While (loginid == “Prasunamba” && pwd == “12345867”){

sout(“ you have logged in for  ”+ count++ +” times”);

sout(“enter ur login id and password”);

loginid = sc.NextLine();

pwd = sc.NextLine();

}

**Ans:**

// Description: This program prompts the user to enter a login ID and password, and keeps track of the number of successful logins.

import java.util.Scanner;

public class Task11 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String correctLoginId = "hrajranj";

        String correctPwd = "12345867";

        String loginid = "";

        String pwd = "";

        int count = 0;

        // Keep asking until correct credentials are entered

        while (true) {

            System.out.println("Enter your login ID:");

            loginid = sc.nextLine();

            System.out.println("Enter your password:");

            pwd = sc.nextLine();

            if (loginid.equals(correctLoginId) && pwd.equals(correctPwd)) {

                count++;

                System.out.println("You have logged in for " + count + " times");

            } else {

                System.out.println("Invalid login ID or password. Try again.");

            }

        }

        // sc.close(); // Unreachable here because of infinite loop

    }

}

**Task 012:**

**Same as above qn but use do while loop**

**Ans:**

// login ID and password validation program using a do-while loop

import java.util.Scanner;

public class Task12 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String correctLoginId = "hrajranj";

        String correctPwd = "12345867";

        String loginid;

        String pwd;

        int count = 0;

        do {

            System.out.println("Enter your login ID:");

            loginid = sc.nextLine();

            System.out.println("Enter your password:");

            pwd = sc.nextLine();

            if (loginid.equals(correctLoginId) && pwd.equals(correctPwd)) {

                count++;

                System.out.println("You have logged in for " + count + " times");

            } else {

                System.out.println("Invalid login ID or password. Try again.");

            }

        } while (true); // Infinite loop – remove 'true' and add a break condition if needed

        // sc.close(); // Unreachable in this form

    }

}

**Task 013:**

**Wap to display numbers from 10 to 1 .. skip 7 and 5.**

for(int i= 10; i >0; i–){

If ( i == 5 || i == 7){

Continue;

sout(i);

}

**Ans:**

//print numbers from 10 to 1, skipping 7 and 5

public class Task13 {

    public static void main(String[] args) {

        System.out.println("Numbers from 10 to 1, skipping 7 and 5:");

        for (int i = 10; i >= 1; i--) {

            if (i == 7 || i == 5) {

                continue; // Skip 7 and 5

            }

            System.out.println(i);

        }

    }

}

**Task 014:**

**Arrays:**

**Try the below code and display the output…**

Now play with it try to access arr of 5th index and see the output…and try to access arr of -1 index and see the output..

package Arrays;

public class Demo01 {

public static void main(String[] args) {

// TODO Auto-generated method stub

char[] arr = {'a','e','i','o','u'};

System.out.println(arr);

String[] names = {"Meena", "Tina", "Veena", "heena"};

System.out.println(names[0]);

names[1]= "Reena";

System.out.println(names[1]);

System.out.println(names.length);

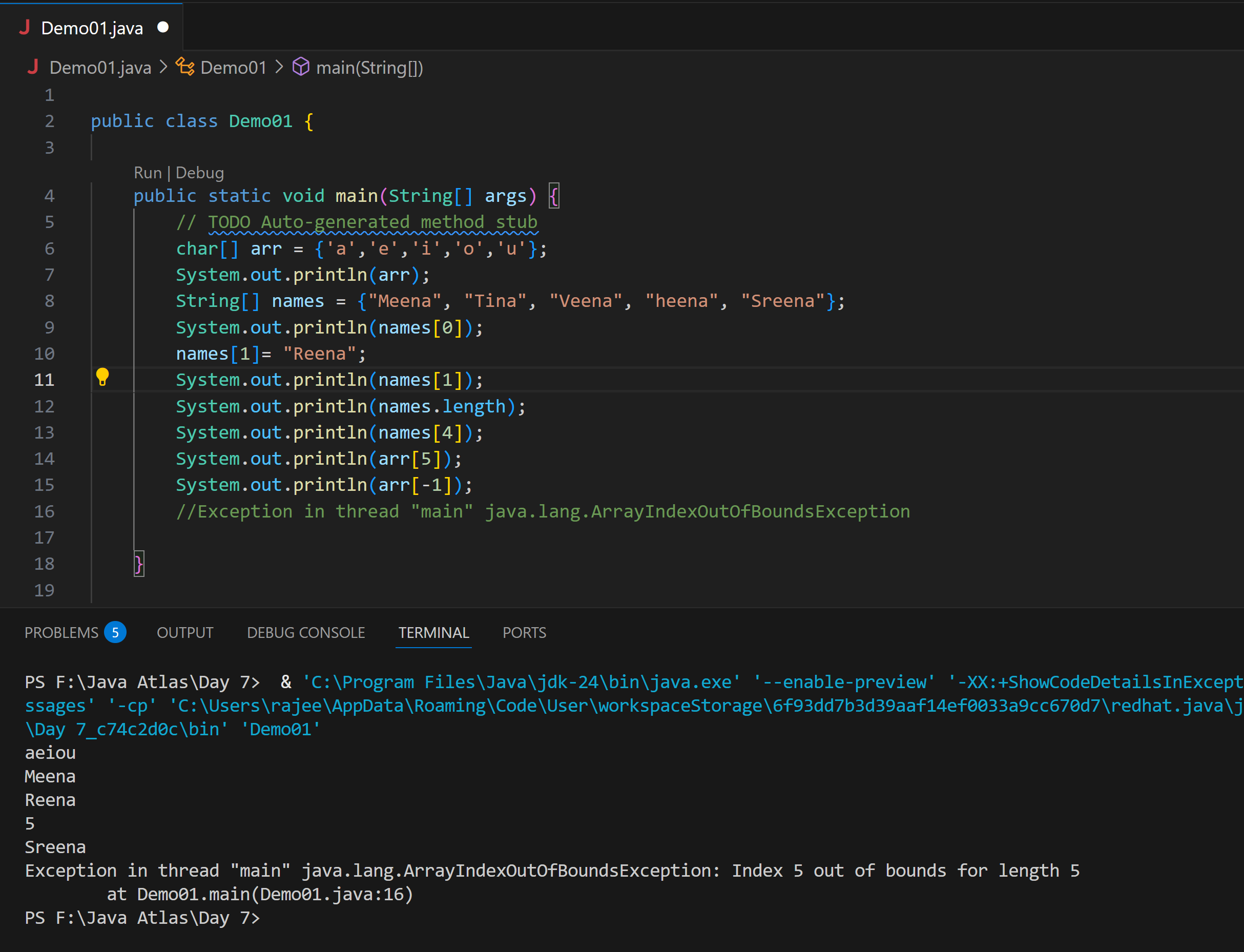
System.out.println(names[4]);

//Exception in thread "main" java.lang.ArrayIndexOutOfBoundsException

}

}

**Ans:**



**Strings:**

**Task 015:**

String – non primitive data gtype —> collection of characters or any value within “ ”

– immutable ⇒ cannot be changed

String Name = “Prasunamba is a trainer”;

Name = “Hello”;

Variables are mutable ⇒ which can be chaged

package StringHandling;

public class Demo01 {

public static void main(String[] args) {

// TODO Auto-generated method stub

String str1 = "Java Strings "; // string Literal

String str2 = new String(str1); // obj of the string - new keyword

String str3 = new String("are easy to learn ");

char ch[] = {'S', 't', 'r' ,'i', 'n', 'g'};

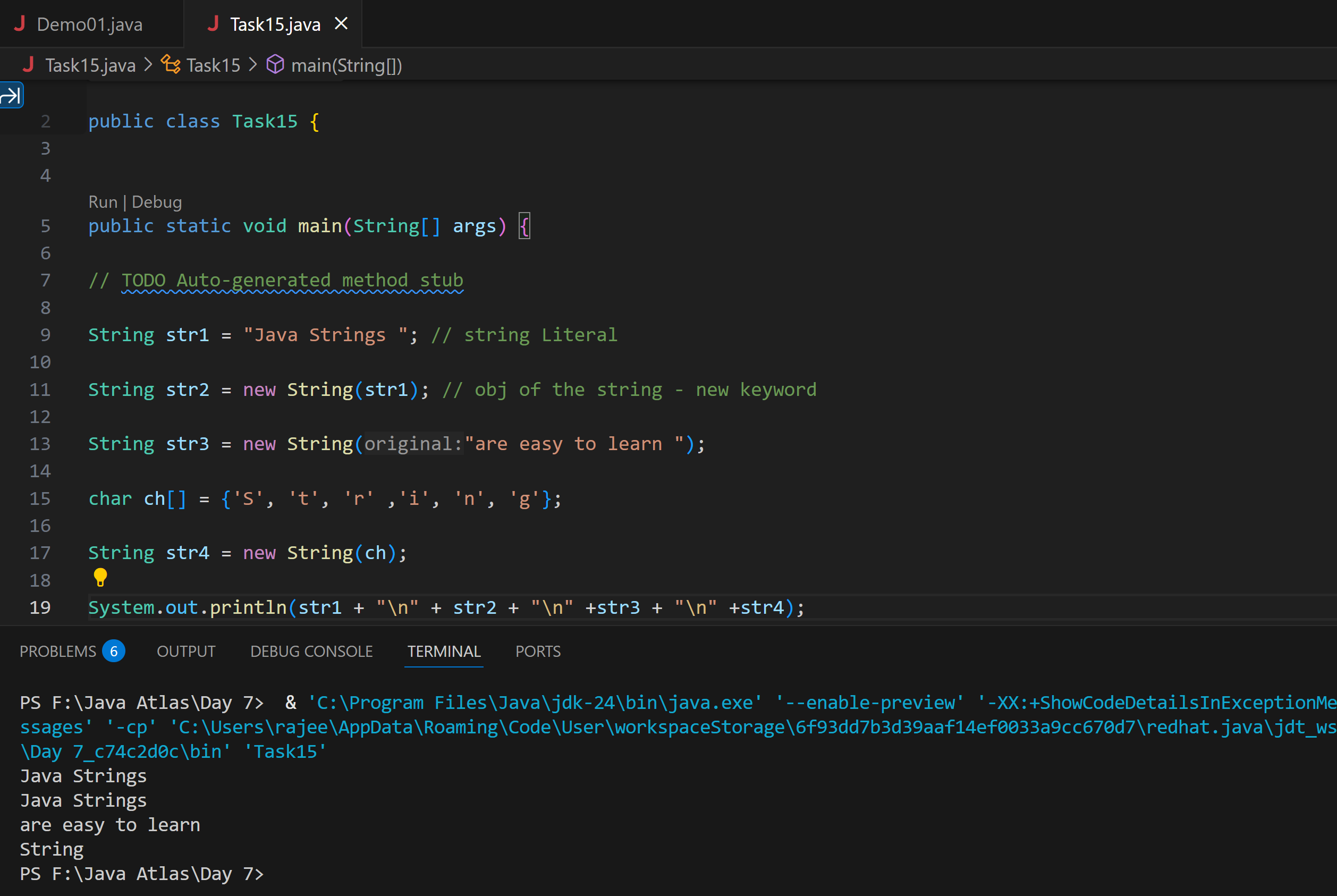
String str4 = new String(ch);

System.out.println(str1 + "\n" + str2 + "\n" +str3 + "\n" +str4);

}

}

**Ans:**



**Task 016**

**Enums or Enumerations**

**What is the output of the below code snippet**

package Enumerations;

enum color{

red, blue, green, yellow

}

public class Task16\_colour {

public static void main(String[] args) {

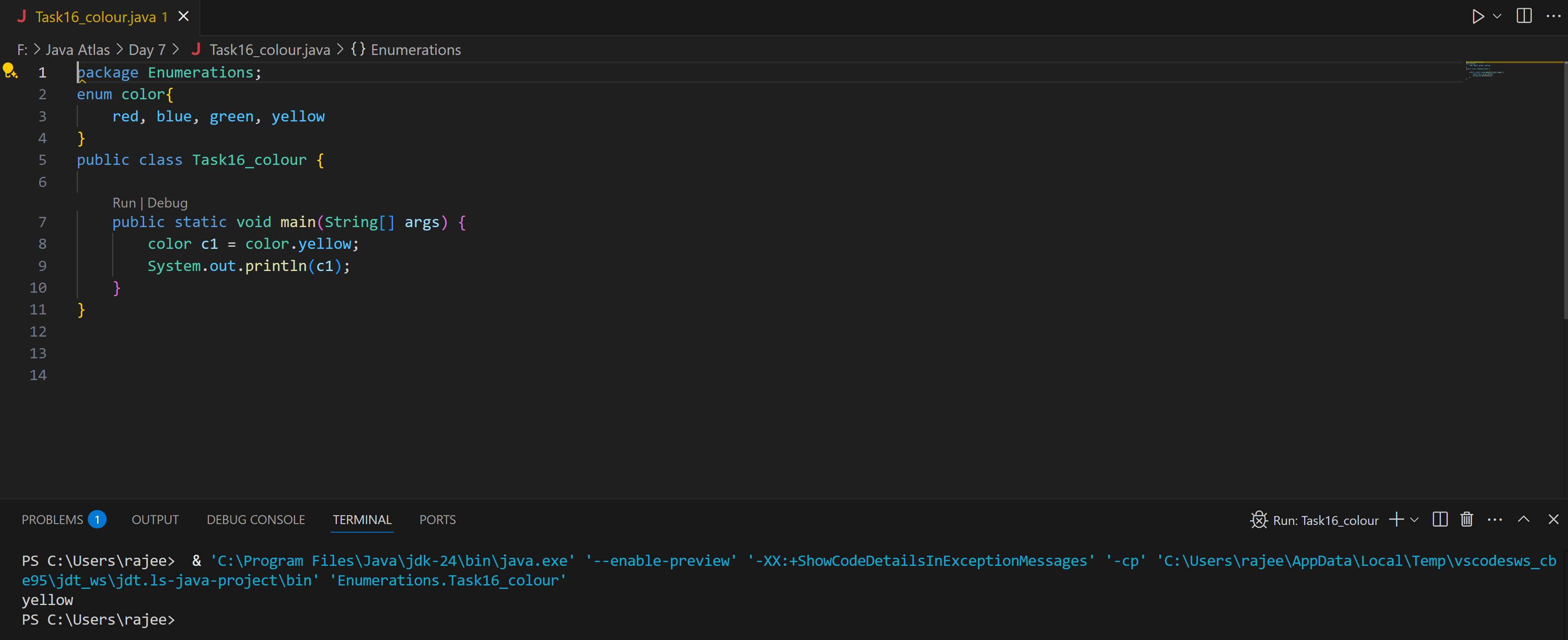
color c1 = color.yellow;

System.out.println(c1);

}

}

**Ans:**



package Enumerations;

enum Weekdays{

Sunday , Monday , Tuesday

}

public class Task16\_weekend {

public static void main(String[] args) {

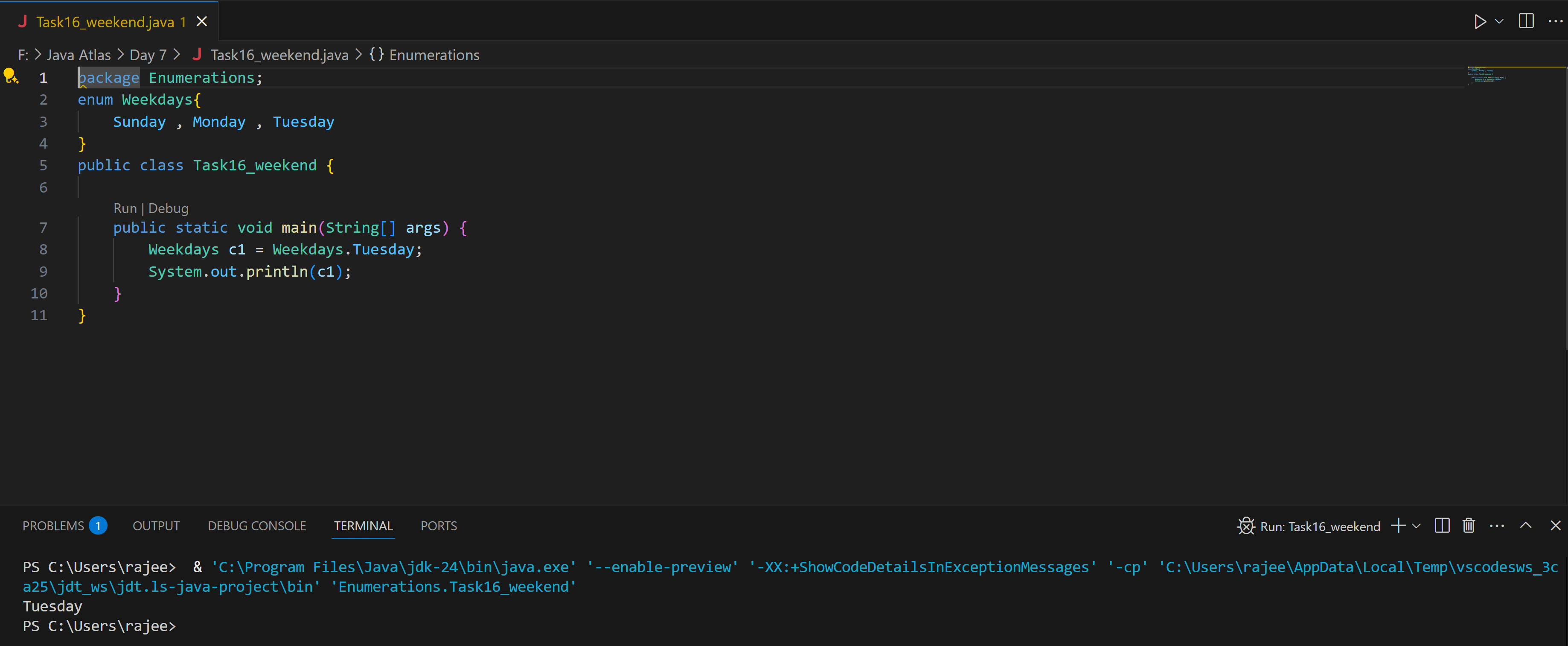
Weekdays c1 = Weekdays.Tuesday;

System.out.println(c1);

}

}

**Ans:**



**Task 017:**

**Getter and setter**

**Create a program name Person.java**

public class Person {

   private String name;

   // Getter

   public String getName() {

     return name;

   }

   // Setter

   public void setName(String newName) {

     this.name = newName;

   }

}

Create another program named Task017.java

public class Task017{

  public static void main(String[] args) {

    Person myObj = new Person();

    myObj.name = "John";

    System.out.println(myObj.name);

  }

}

—----------------------------------what is the reason for the error —---------------explain

**Ans:**

The error occurs because we are trying to access and modify a private variable directly from outside its class. The variable name is marked private which means it cannot be accessed directly from outside the Person class.

We must use getter and setter methods to read or modify its value.

**Task 018**

**Now create one more program named Task018.java**

public class Main {

  public static void main(String[] args) {

    Person myObj = new Person();

    myObj.setName("John");

    System.out.println(myObj.getName());

  }

}

Now —--------------think what is the output of the above code—--------------

**Ans:**

John