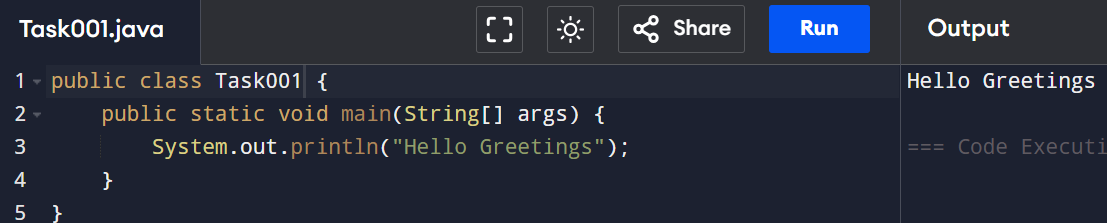
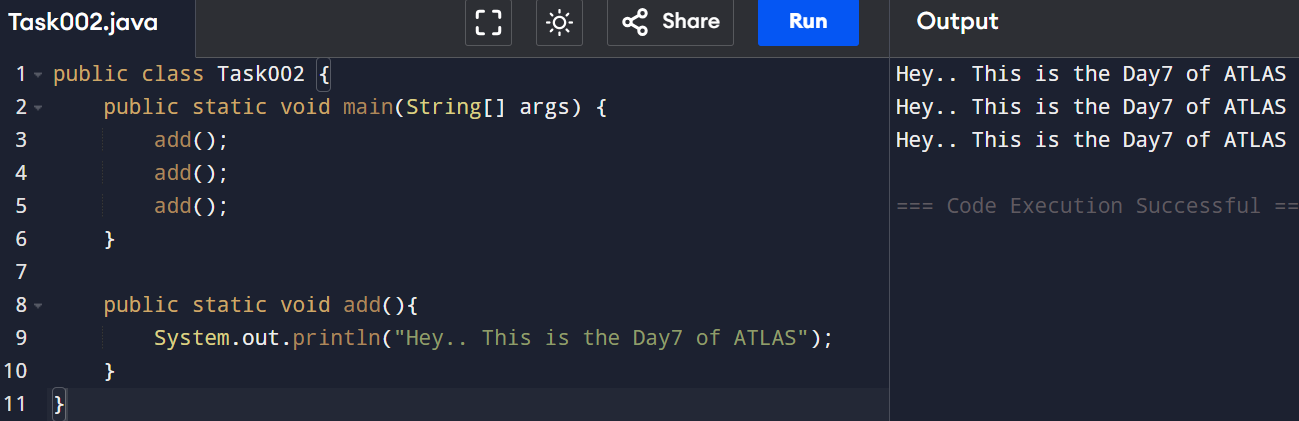
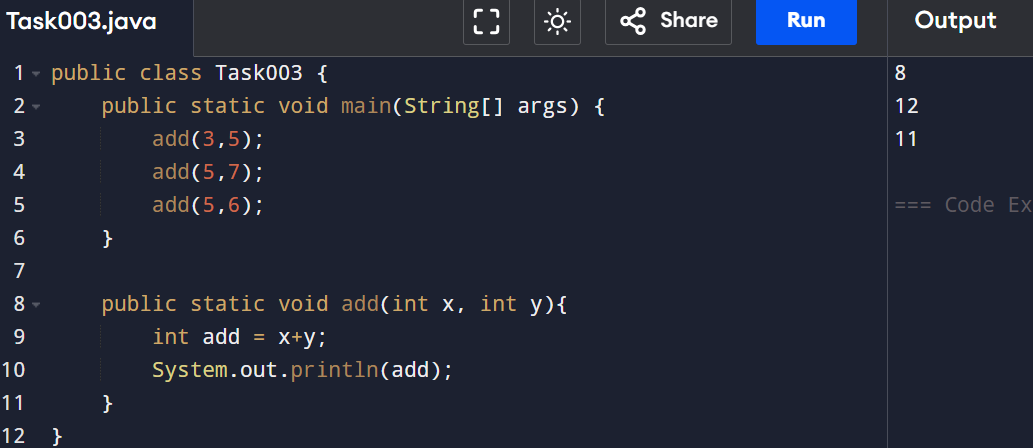
**Task001: Write a program to display Greetings**



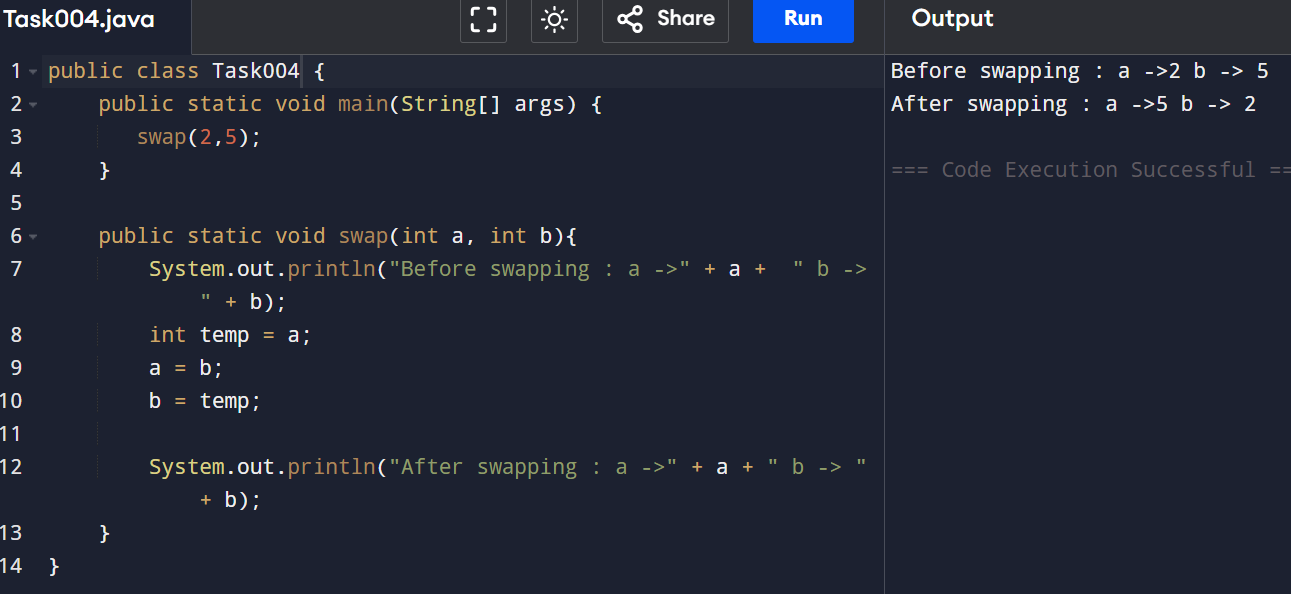
**Task002: Write a program to create a add method and call the method 3 times**

****

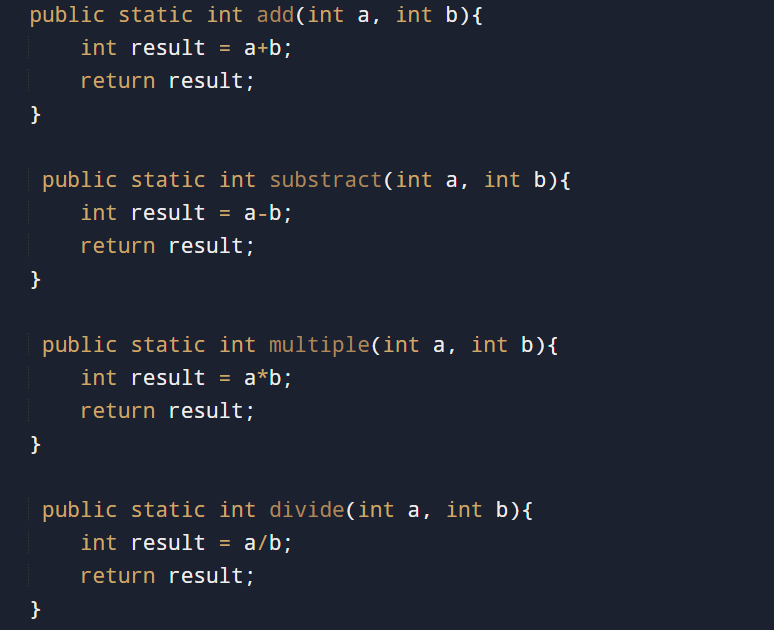
**Task003: Write a Program in Java to Add two Numbers**

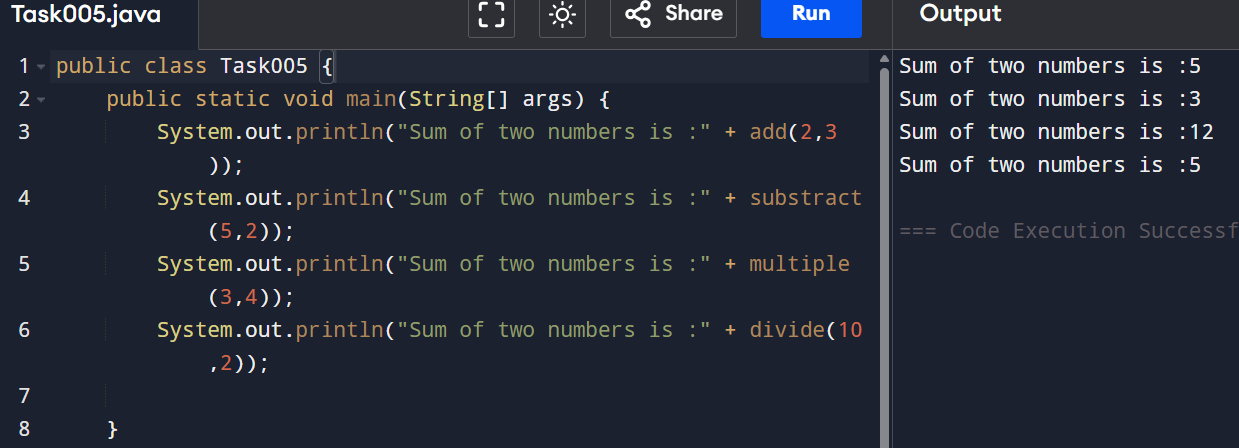


**Task004: Write a Program to Swap Two Numbers**



**Task005: Create a code in which you have 4 methods add, subtract, multiply and divide (return type int) with a main method to call all the other methods**

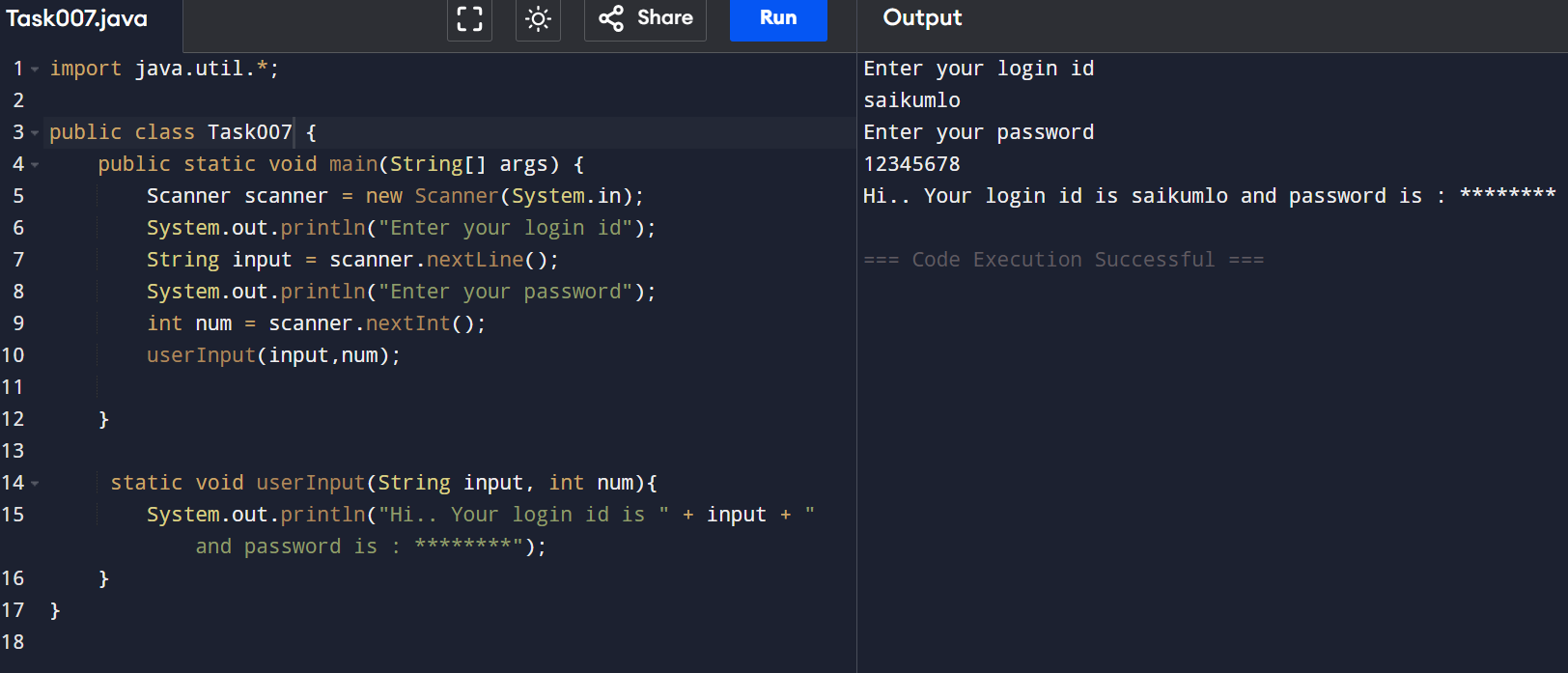
****

****

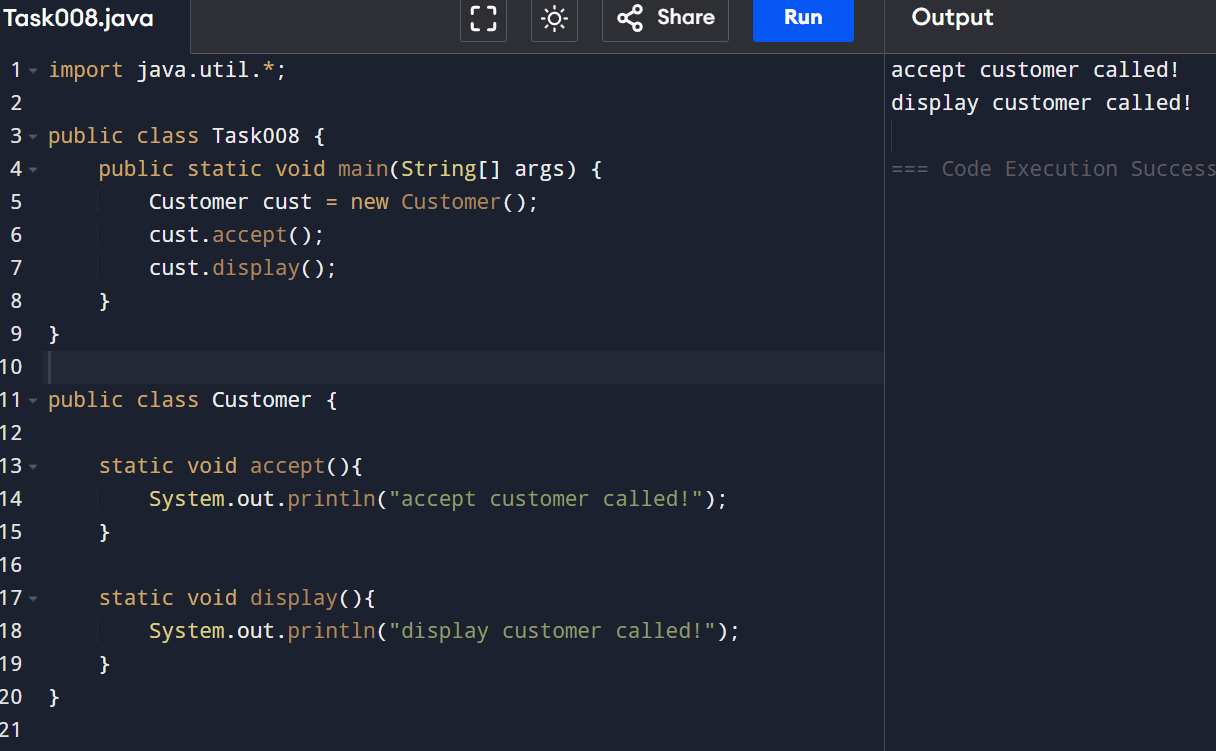
**Task006:** **Write a program to check if a is greater or b**

****

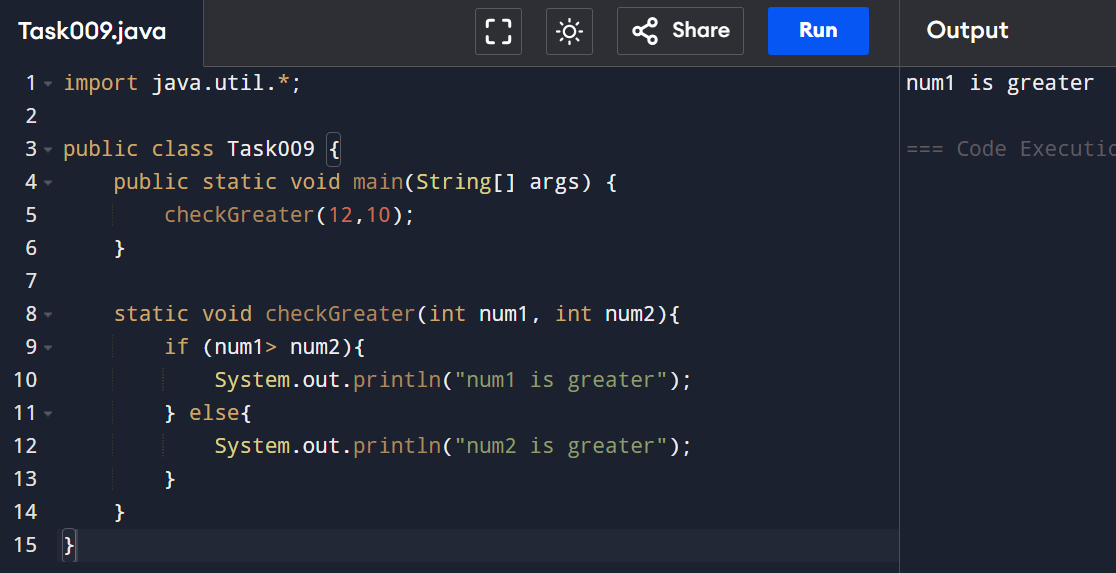
**Task007: Write a program to take input from the user and display it to the user**

****

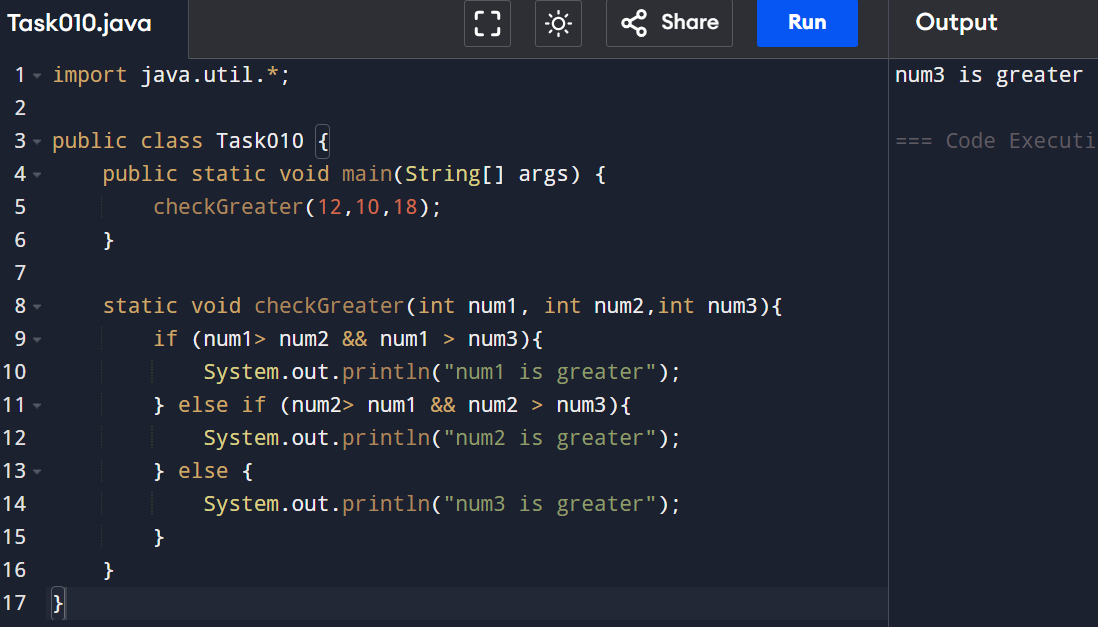
**Task008: Write a program to create a class named Customer, Call the customer class in Task008 class using an object**

****

**Task009: Write a program to check the greater of 2 numbers**

****

**Task010:** **Write a program to check greater of 3 numbers**

****

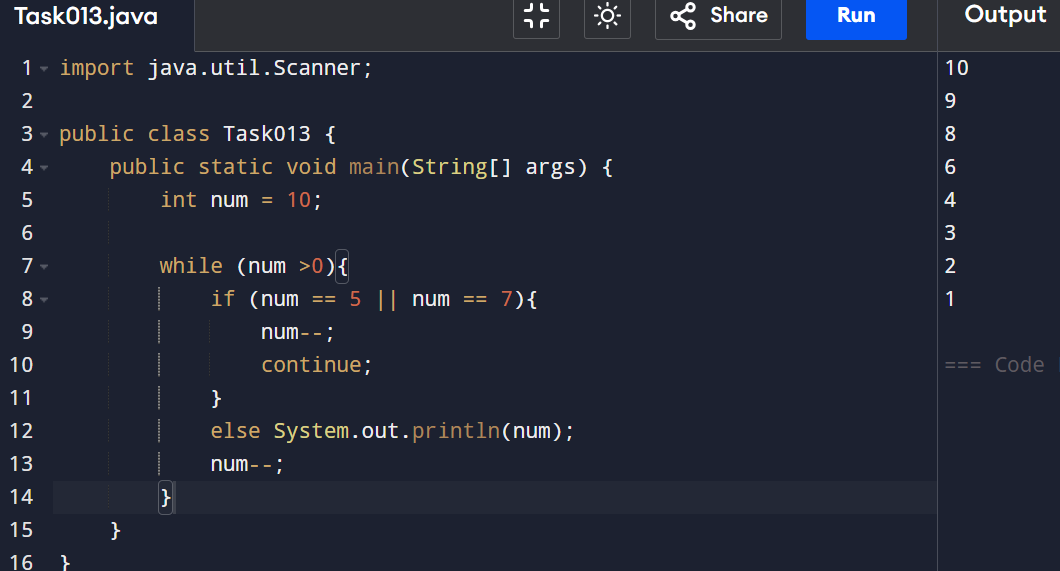
**Task011: Write a program to check weekdays**

****

**Task012: Write a program for login and password validation**

import java.util.\*;  
  
public class Task012 {  
 public static void main(String[] args) {  
 Scanner sc = new Scanner(System.*in*);  
  
 String validLoginId = "saikumlo";  
 String validPwd = "12345678";  
  
 System.*out*.print("Enter your login ID: ");  
 String loginId = sc.nextLine();  
 System.*out*.print("Enter your password: ");  
 String pwd = sc.nextLine();  
  
 int count = 0;  
  
 while (loginId.equals(validLoginId) && pwd.equals(validPwd)) {  
 count++;  
 System.*out*.println("You have logged in for " + count + " times");  
  
 System.*out*.print("Enter your login ID: ");  
 loginId = sc.nextLine();  
  
 System.*out*.print("Enter your password: ");  
 pwd = sc.nextLine();  
 }  
  
 System.*out*.println("Invalid login or password. Exiting..!");  
 }  
}

**Task013: Write a program display numbers from 10 to 1 .. skip 7 and 5.**

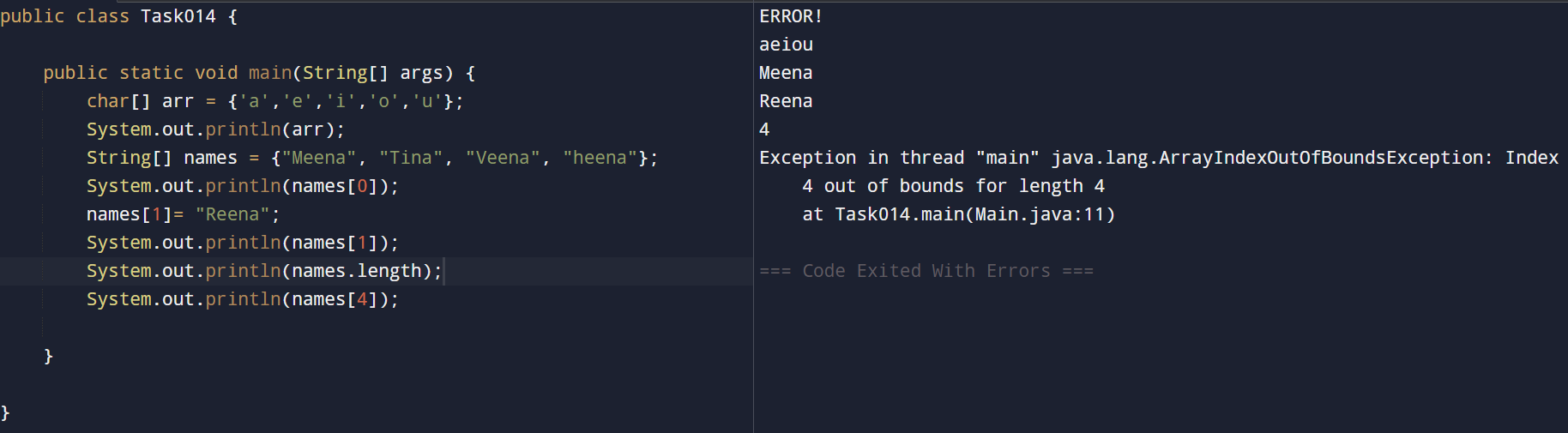
****

**Task014: Try the below code and display the output…**

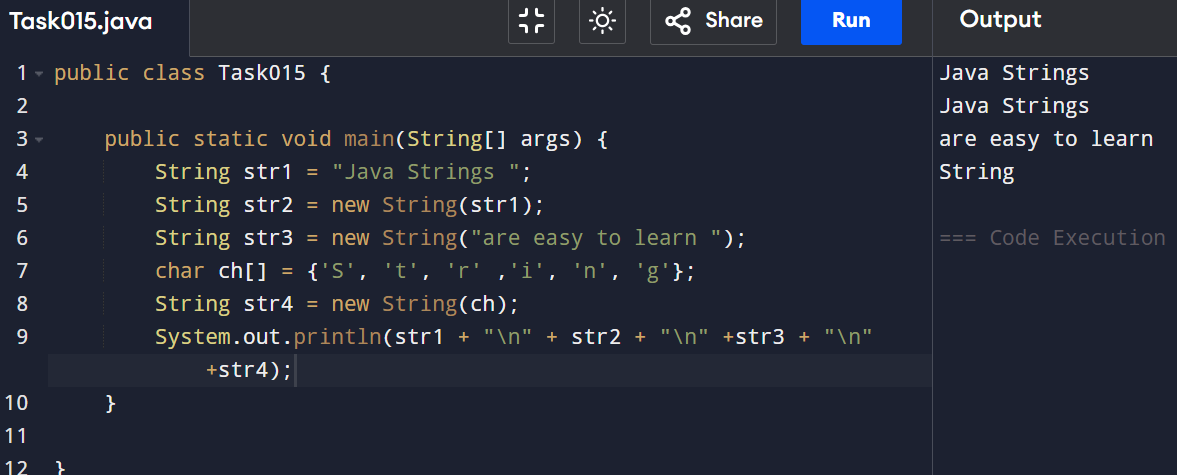
**Now play with it try to access arr of 5th index and see the output…and try to access arr of -1 index and see the output**

public class Demo01 {  
 public static void main(String[] args) {  
 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  
 }  
}

****

**Task015: Create a string in multiple ways**

****

**Task016: What is the output of below snippet**

*enum color{*

*red, blue, green, yellow*

*}*

*public class Demo01 {*

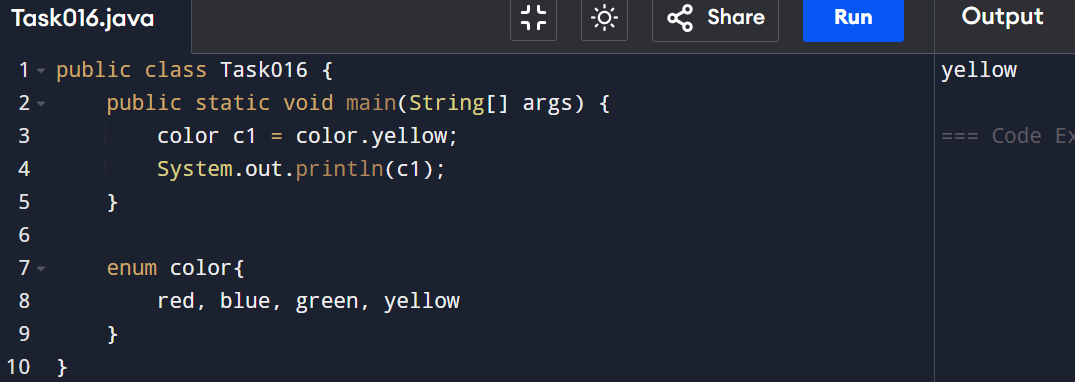
*public static void main (String[] args) {*

*color c1 = color.yellow;*

*System.out.println(c1);*

*}*

*}*

**

**Task017: 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**

Here the program is failing is we are trying to access a private variable outside of the class. Hence, we are getting compilation error.

To avoid this, we can use getter and setter methods.

****

**Task018: Fix above issue using getter and setter**

****

**Task019: Write a program to display the content from the below Enum**

*Enums    – understand the code   
  
public enum Element {*

*H("Hydrogen", 1, 1.008f),*

*HE("Helium", 2, 4.0026f),*

*NE("Neon", 10, 20.180f);*

*private static final Map<String, Element> BY\_LABEL = new HashMap<>();*

*private static final Map<Integer, Element> BY\_ATOMIC\_NUMBER = new HashMap<>();*

*private static final Map<Float, Element> BY\_ATOMIC\_WEIGHT = new HashMap<>();*

*static {*

*for (Element e : values()) {    //for each loop*

*BY\_LABEL.put(e.label, e);*

*BY\_ATOMIC\_NUMBER.put(e.atomicNumber, e);*

*BY\_ATOMIC\_WEIGHT.put(e.atomicWeight, e);*

*}*

*}*

*public final String label;*

*public final int atomicNumber;*

*public final float atomicWeight;*

*private Element(String label, int atomicNumber, float atomicWeight) {*

*this.label = label;*

*this.atomicNumber = atomicNumber;*

*this.atomicWeight = atomicWeight;*

*}*

*public static Element valueOfLabel(String label) {*

*return BY\_LABEL.get(label);*

*}*

*public static Element valueOfAtomicNumber(int number) {*

*return BY\_ATOMIC\_NUMBER.get(number);*

*}*

*public static Element valueOfAtomicWeight(float weight) {*

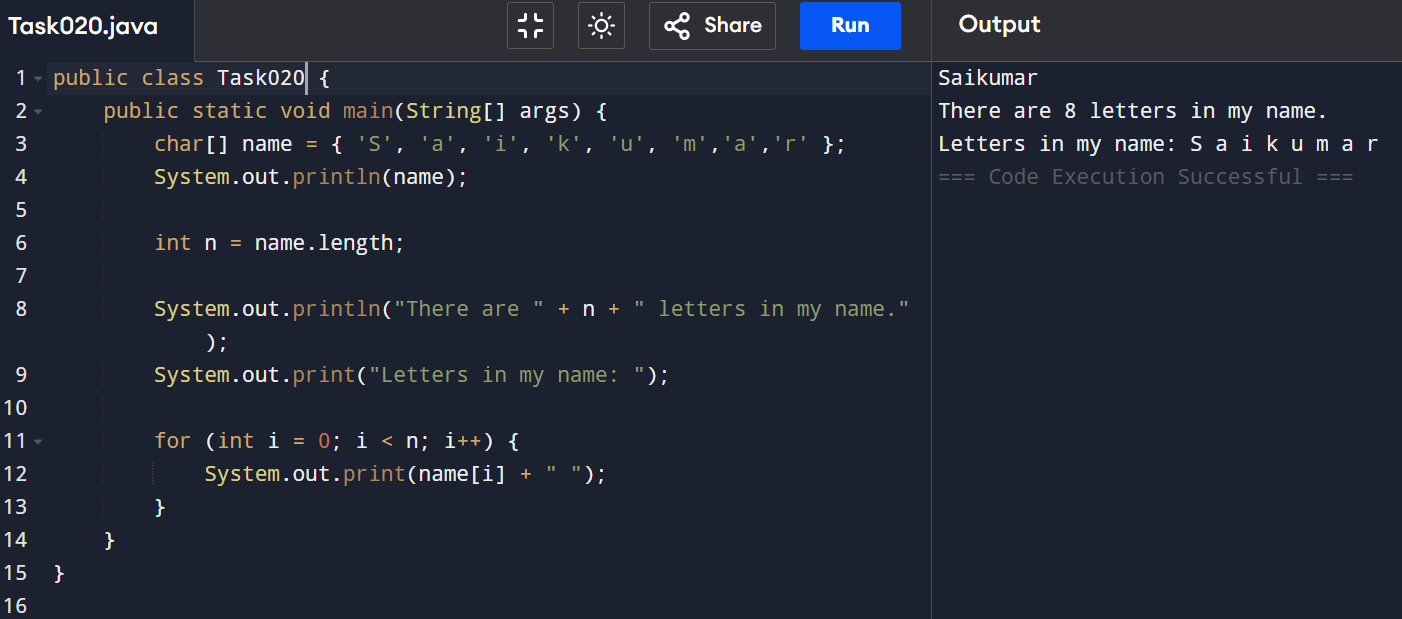
*return BY\_ATOMIC\_WEIGHT.get(weight);*

*}*

*}*

import java.util.\*;  
  
public class Task020 {  
 public static void main(String[] args) {  
 System.*out*.println("Displaying elements from Element enum:\n");  
  
 for (Element e : Element.*values*()) {  
 System.*out*.println("Symbol : " + e.name());  
 System.*out*.println("Label : " + e.label);  
 System.*out*.println("Atomic Number : " + e.atomicNumber);  
 System.*out*.println("Atomic Weight : " + e.atomicWeight);  
 System.*out*.println();  
 }  
  
 System.*out*.println("Lookup by label 'Oxygen': " + Element.*valueOfLabel*("Oxygen"));  
 System.*out*.println("Lookup by atomic number 2: " + Element.*valueOfAtomicNumber*(2));  
 System.*out*.println("Lookup by weight 1.008f: " + Element.*valueOfAtomicWeight*(1.008f));  
 }  
  
 public enum Element {  
 *H*("Hydrogen", 1, 1.008f),  
 *HE*("Helium", 2, 4.0026f),  
 *LI*("Lithium", 3, 6.94f),  
 *BE*("Beryllium", 4, 9.0122f),  
 *B*("Boron", 5, 10.81f),  
 *C*("Carbon", 6, 12.011f),  
 *N*("Nitrogen", 7, 14.007f),  
 *O*("Oxygen", 8, 15.999f),  
 *F*("Fluorine", 9, 18.998f),  
 *NE*("Neon", 10, 20.180f);  
  
 public final String label;  
 public final int atomicNumber;  
 public final float atomicWeight;  
  
 private static final Map<String, Element> *BY\_LABEL* = new HashMap<>();  
 private static final Map<Integer, Element> *BY\_ATOMIC\_NUMBER* = new HashMap<>();  
 private static final Map<Float, Element> *BY\_ATOMIC\_WEIGHT* = new HashMap<>();  
  
 static {  
 for (Element e : *values*()) {  
 *BY\_LABEL*.put(e.label, e);  
 *BY\_ATOMIC\_NUMBER*.put(e.atomicNumber, e);  
 *BY\_ATOMIC\_WEIGHT*.put(e.atomicWeight, e);  
 }  
 }  
  
 private Element(String label, int atomicNumber, float atomicWeight) {  
 this.label = label;  
 this.atomicNumber = atomicNumber;  
 this.atomicWeight = atomicWeight;  
 }  
  
 public static Element valueOfLabel(String label) {  
 return *BY\_LABEL*.get(label);  
 }  
  
 public static Element valueOfAtomicNumber(int number) {  
 return *BY\_ATOMIC\_NUMBER*.get(number);  
 }  
  
 public static Element valueOfAtomicWeight(float weight) {  
 return *BY\_ATOMIC\_WEIGHT*.get(weight);  
 }  
 }  
  
}

**Task020: Create an Array and print it**

****