**JAVA PROGRAMMING**

**—-------------------------------------------------------------------------------------------------------------------------**

**Static Example:**

**#include <stdio.h>**

**int add()**

**{**

**int x=10;**

**static int y=20;**

**x++;**

**y++;**

**printf("%d\n",x);**

**printf("%d\n",y);**

**}**

**int main() {**

**add();**

**add();**

**add();**

**// Write C code here**

**return 0;**

**}**

**Output : 11**

**21**

**11**

**22**

**11**

**23**

**TASK001.java**

class Main {

public static void main(String[] args) {

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

System.out.print("Hello World");

System.out.print("Hello World");

}

}

**Output:**

**Hello World**

**Hello WorldHello World**

**TASK002.java**

Write a program to create a add method and call the method 3 times ..

**TASK003.java**

**public class Add {**

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

**{**

**int sum = a+b;**

**System.*out*.println(sum);**

**return sum;**

**}**

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

***add*(5, 10);**

**}**

**}**

**Output:**

15

**TASK004.java**

**public class swap {**

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

**{**

**int a = 5;**

**int b = 10;**

**System.*out*.println("Before Swap:");**

**System.*out*.println( a);**

**System.*out*.println(b);**

**int temp = a;**

**a = b;**

**b = temp;**

**System.*out*.println("After Swap:");**

**System.*out*.println(a);**

**System.*out*.println(b);**

**}**

**}**

**public class swap {**

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

**{**

**int a = 5;**

**int b = 10;**

**System.*out*.println("Before Swap:");**

**System.*out*.println( a);**

**System.*out*.println(b);**

**a = a + b;**

**b = a - b;**

**a = a - b;**

**System.*out*.println("After Swap:");**

**System.*out*.println(a);**

**System.*out*.println(b);**

**}**

**}**

**Output**

Before Swap:

5

10

After Swap:

10

5

**TASK005.java**

**public class Main {**

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

**return a + b;**

**}**

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

**return a - b;**

**}**

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

**return a \* b;**

**}**

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

**return a / b;**

**}**

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

**int a = 20;**

**int b = 5;**

**System.out.println("Addition: " + add(a, b));**

**System.out.println("Subtraction: " + subtract(a, b));**

**System.out.println("Multiplication: " + multiply(a,b));**

**System.out.println("Division: " + divide(a, b));**

**}**

**}**

**Output**

Addition: 25

Subtraction: 15

Multiplication: 100

Division: 4

**TASK006.java**

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

**public class Main {**

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

**int a = 20;**

**int b = 5;**

**if (a>b)**

**{**

**System.out.println("a is greater than b");**

**}**

**}**

**}**

**Or**

**public class TASK006 {**

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

**{**

**int a = 10;**

**int b = 5;**

**String res = (a>b) ? " a is greater than b " : "b is greater than a";**

**System.*out*.println(res);**

**}**

**}**

**Output**

a is greater than b

**TASK007.java**

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

**import java.util.Scanner;**

**public class Main {**

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

**Scanner sc = new Scanner(System.in);**

**System.out.println("Enter Your age: ");**

**int num = sc.nextInt();**

**System.out.println("Number I entered is : " +num);**

**}**

**}**

**Output**

Enter Your age:

23

Number I entered : 23

**import java.util.Scanner;**

**public class UserInput {**

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

**Scanner sc = new Scanner(System.*in*);**

**System.*out*.println("Enter your name : ");**

**String name = sc.nextLine();**

**System.*out*.println("The name that I entered is :" + name);**

**// TODO Auto-generated method stub**

**}**

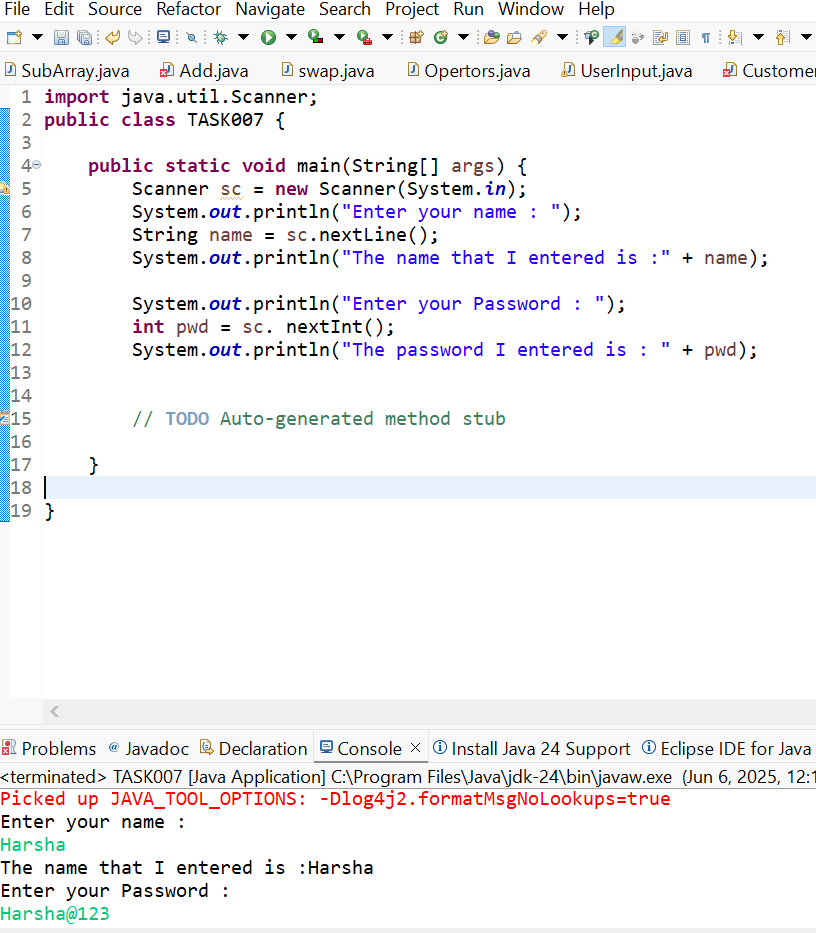
**}**

**Output**

**Enter your name :**

**Harsha**

**The name that I entered is :Harsha**

****

**TASK008**

Write a program to create a class named Customer

Call the customer class in Task008 class using an object

**public class Customer {**

**public static void Accept()**

**{**

**System.*out*.println("Accept Customer call");**

**}**

**public static void display()**

**{**

**System.*out*.println("Display Customer call");**

**}**

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

**{**

**Customer cobj = new Customer();**

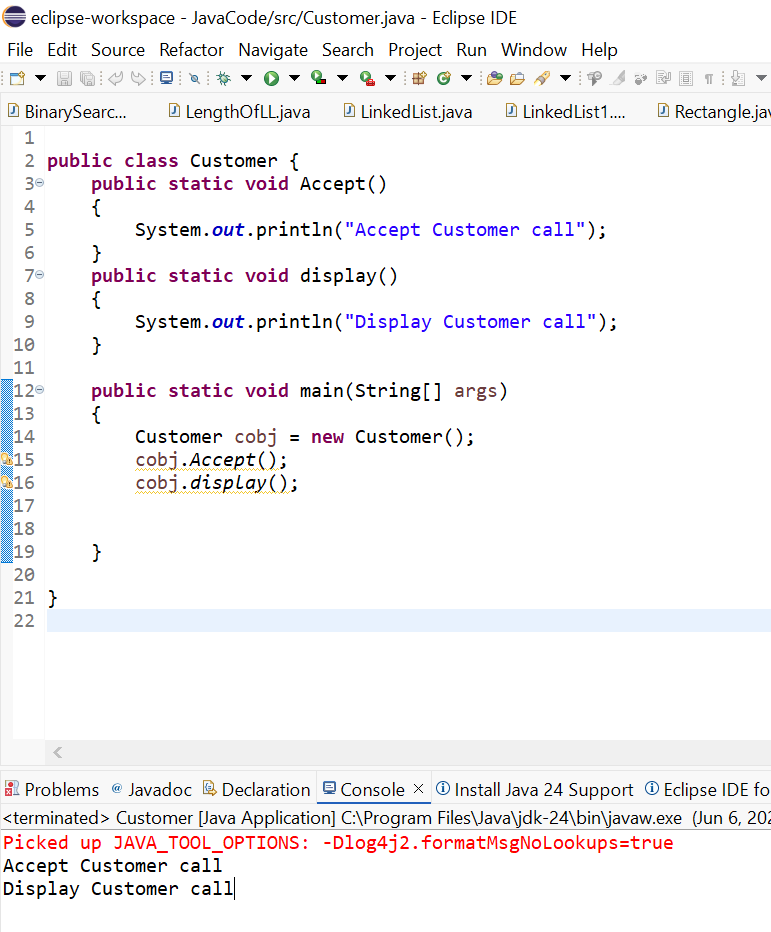
**cobj.*Accept*();**

**cobj.*display*();**

**}**

**}**

**Output**

****

**TASK009**

Write a program to check the greater of 2 numbers

**public** **class** TASK009 {

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

{

**int** num1 = 30;

**int** num2 = 50;

**if** (num1>num2)

{

System.***out***.println(num1 + " is greater than " + num2);

}

**else** {

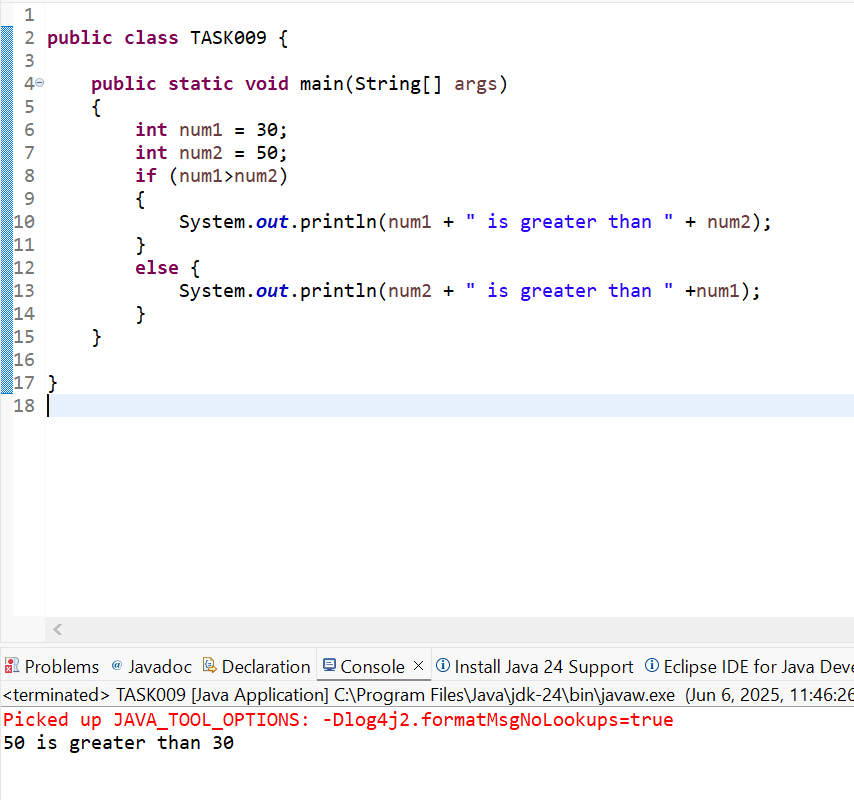
System.***out***.println(num2 + " is greater than " +num1);

}

}

}

**Output:**

****

**TASK010**

Wap to check greater of 3 numbers

**public class TASK010 {**

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

**{**

**int a = 10;**

**int b = 20;**

**int c = 30;**

**if(a>b && a>c)**

**{**

**System.*out*.println(a + "is greater");**

**}**

**else if (b>a && b>c)**

**{**

**System.*out*.println(b + " is greater");**

**}**

**else if(c>a && c>b)**

**{**

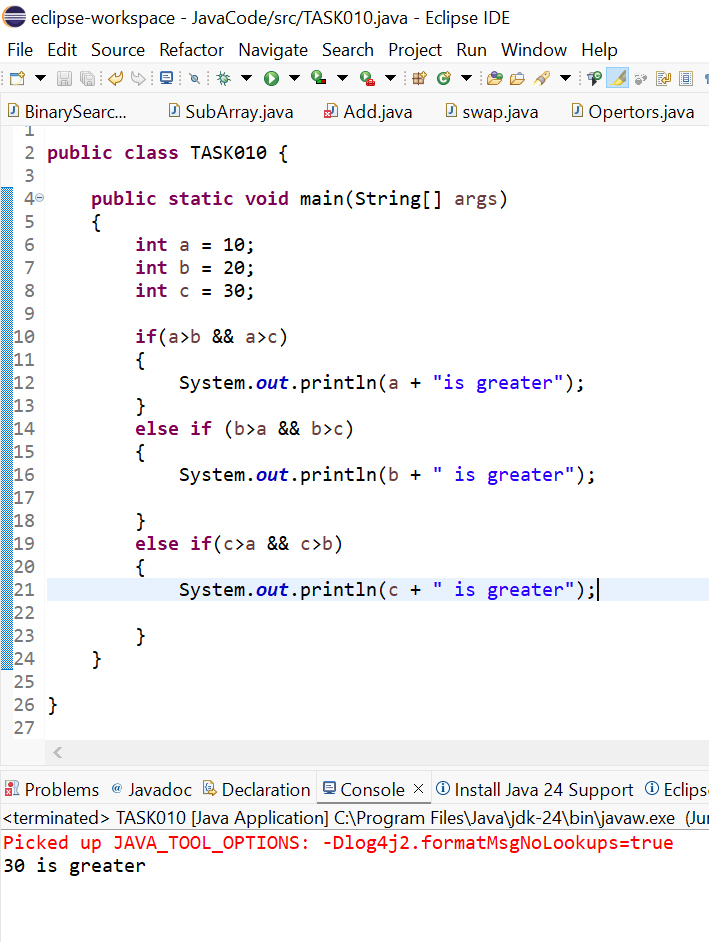
**System.*out*.println(c + " is greater");**

**}**

**}**

**}**

**Output:**

****

**TASK011**

Wap to check if week days

1 ===> sunday

2 ===> monday

So on

8 and above ===> invalid input

Hint : use Switch case

import java.util.Scanner;

public class TASK011

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.*in*);

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

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");

}

}

}

**Output**

**Enter a number (1 to 7):** 2

Monday

**TASK012**

Wap to check loginid and password validation

**import java.util.Scanner;**

**public class TASK012 {**

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

**Scanner sc = new Scanner(System.*in*);**

**String loginid = "Harsha";**

**String pwd = "12345867";**

**int count = 0;**

**while (true) {**

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

**String inputId = sc.nextLine();**

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

**String inputPwd = sc.nextLine();**

**if (inputId.equals(loginid) && inputPwd.equals(pwd)) {**

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

**} else {**

**System.*out*.println("Invalid login ID or password. Exiting...");**

**break;**

**}**

**}**

**}**

**}**

**Output**

**Enter your login ID:** Harsha

**Enter your password:** 12345867

You have logged in for 1 times.

import java.util.Scanner;

public class TASK012 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.*in*);

String validLoginId = "Harsha";

String validPassword = "Harsha@123";

String loginId, password;

int count = 0;

do {

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

loginId = sc.nextLine();

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

password = sc.nextLine();

if (loginId.equals(validLoginId) && password.equals(validPassword)) {

count++;

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

} else {

System.*out*.println("Invalid login ID or password. Exiting...");

}

} while (loginId.equals(validLoginId) && password.equals(validPassword));

}

}

**Output**

**Enter your login ID: Harsha**

**Enter your password: Harsha@123**

**You have logged in for 1 times.**

**Enter your login ID: Harsha**

**Enter your password: 123415779**

**Invalid login ID or password. Exiting…**

**TASK013**

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

**public class TASK013**

**{**

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

**{**

**for(int i=10; i>0; i--)**

**{**

**if(i==5||i==7)**

**{**

**continue;**

**}**

**System.*out*.println(i);**

**}**

**}**

**}**

**Output :**

**10**

**9**

**8**

**6**

**4**

**3**

**2**

**1**

**TASK014**

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..

**public class TASK014**

**{**

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

**{**

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

**System.*out*.println(arr);**

**String[] things = {"Apple", "Ball", "Cat", "Dog"};**

**System.*out*.println(things[0]);**

**System.*out*.println(things[1]);**

**things[1] = "Aeroplane";**

**System.*out*.println(things[1]);**

**}**

**}**

**Output:**

**aeiou**

**Apple**

**Ball**

**Aeroplane**

**TASK015**

**public class TASK015 {**

**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);**

**}**

**}**

**Output**

**Java Strings**

**Java Strings**

**are easy to learn**

**String**

**TASK 016**

**package Enumerations;**

**enum color{**

***red*, *blue*, *green*, *yellow***

**}**

**public class TASK016 {**

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

**color c1 = color.*yellow*;**

**System.*out*.println(c1);**

**}**

**}**

**Output : yellow**

**package Enumerations;**

**enum Weekdays{**

***Sunday* , *Monday* , *Tuesday***

**}**

**public class TASK016 {**

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

**Weekdays c1 = Weekdays.*Tuesday*;**

**System.*out*.println(c1);**

**}**

**}**

**Output : Tuesday**

**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;

}

}

public class Task017 {

public static void main(String[] args) {

Person myObj = new Person();

// Set name using setter

myObj.setName("John");

// Get name using getter

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

}

}

Output

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

The reason is that, we initialized the variable name as **PRIVATE.**

**TASK018**

**class person {**

**private String name;**

**// Getter**

**public String getName() {**

**return name;**

**}**

**// Setter**

**public void setName(String newName) {**

**this.name = newName;**

**}**

**}**

**public class TASK018 {**

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

**person myObj = new person();**

**// Set name using setter**

**myObj.setName("John");**

**// Get name using getter**

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

**}**

**}**

**Output**

**John**

**TASK016\_1**

**import java.util.HashMap;**

**import java.util.Map;**

**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);**

**}**

**}**

**class TASK016\_1 {**

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

**Element e1 = Element.*valueOfLabel*("Helium");**

**System.*out*.println(e1); // Output: HE**

**Element e2 = Element.*valueOfAtomicNumber*(1);**

**System.*out*.println(e2.label); // Output: Hydrogen**

**Element e3 = Element.*valueOfAtomicWeight*(20.180f);**

**System.*out*.println(e3); // Output: NE**

**}**

**}**

**Output**

**HE**

**Hydrogen**

**NE**

**TASK -20**

**public class TASK020**

**{**

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

**{**

**char[] name = {'H', 'A', 'R', 'S', 'H', 'A'};**

**System.*out*.println(name);**

**int n = name.length;**

**System.*out*.println("There are "+ n+" letters in my name");**

**for(int i=0; i<n; i++)**

**{**

**System.*out*.println(name[i] + " ");**

**}**

**}**

**}**

**Output**

**HARSHA**

**There are 6 letters in my name**

**H**

**A**

**R**

**S**

**H**

**A**