**Task 1:**

Create a code to display

“Hello guys!!!! “

“We are learning Java”

program:-  
Class FirstProgram   
{  
public static void main(String args[])   
{  
System.out.println(“Hello guys!!!!”);   
System.out.println(“We are learning Java”);  
}  
}   
  
output:-Hello guys!!!!   
We are learning java   
  
  
**Task 2:**

 Write a Program in Java to Add two Numbers.

Input: 2 3

Program:-  
class AddTwoNumbers   
{  
public static void main(String args[])   
{  
int a=2;   
int b=3;   
System.out.println(a+b);   
}}   
  
output:-5   
  
  
**Task 3:**

Write a Program to Swap Two Numbers

Input: a=2  b=5

Program:-   
class SwapTwoNumbers

{  
public static void main(String args[])   
{  
int a=2;  
int b=5;   
int temp=a;   
a=b;   
b=temp;   
System.out.println(a);   
System.out.println(b);   
}}

Output:5  
2  
  
**Task 4:**

 Create a code in which you have 4 methods add, subtract, multiply and divide (return type int) with a main [method..to](http://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

Program: -  
public class Calculator {

// Method to add two numbers

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

return a + b;

}

// Method to subtract two numbers

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

return a - b;

}

// Method to multiply two numbers

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

return a \* b;

}

// Method to divide two numbers

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

return a / b; // Assumes b is not zero

}

// Main method

public static void main(String[] args) {

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

int num1 = 20;

int num2 = 5;

int sum = add(num1, num2);

int diff = subtract(num1, num2);

int product = multiply(num1, num2);

int quotient = divide(num1, num2);

System.out.println("Sum of 2 numbers is " + sum);

System.out.println("Diff of 2 numbers is " + diff);

System.out.println("Product of 2 numbers is " + product);

System.out.println("Division of 2 numbers is " + quotient);

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

}

}

Output:- Main started

Sum of 2 numbers is 25

Diff of 2 numbers is 15

Product of 2 numbers is 100

Division of 2 numbers is 4

Main ended   
  
  
**Task 5:** Ternanry operator  
  
class Task5   
{  
public static void main(string args[])   
{  
int a=10;  
int b=5;   
String result=(a>b)?”a Is greater”:”b is greater”;   
System.out.println(result);   
}}  
  
output:-a is greater   
  
  
**Task 6 :**import java.util.Scanner;

public class UserInput {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter Id: ");

String id = sc.nextLine();

System.out.print("Enter Password: ");

String password = sc.nextLine();

System.out.println("\nYou entered:");

System.out.println("Id: " + id);

System.out.println("Password: " + password);

sc.close();

}

}   
output:-  
Enter Id: Srinivas

Enter Password: 123456789

You entered:

Id:Srinivas

Password: 123456789   
  
  
**Task 7:**

Write a program to create a class named Customer

Call the customer class in Task007 class using an object

program:-   
// Customer.java

public class Customer {

public void displayCustomerInfo() {

System.out.println("Customer Name: Srinivas");

System.out.println("Customer ID: C123");

System.out.println("Location: Hyderabad");

}

}  
// Task007.java

public class Task007 {

public static void main(String[] args) {

// Creating object of Customer class

Customer customerObj = new Customer();

// Calling method using object

customerObj.displayCustomerInfo();

}

}  
output:-  
Customer NameSrinivas

Customer ID: C123

Location: Hyderabad   
  
**Task 8 :**Wap to check the greater of 2 numbers  
  
program:-   
public class Task008 {

public static void main(String[] args) {

int num1 = 25;

int num2 = 40;

if (num1 > num2) {

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

} else if (num2 > num1) {

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

} else {

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

}

}

}  
  
output:-  
40 is greater than 25

**Task 9 :**Wap to check the greater of 2 numbers

public class Task9 {

public static void main(String[] args) {

int num1 = 45;

int num2 = 23;

if (num1 > num2) {

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

} else if (num2 > num1) {

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

} else {

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

}

}

}  
  
output:-  
45 is greater than 23   
  
**Task 10 :**public class Task10 {

public static void main(String[] args) {

int num1 = 45;

int num2 = 78;

int num3 = 66;

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

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

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

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

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

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

} else {

System.out.println("Two or more numbers are equal and greatest.");

}

}

}  
  
output:- 78 is the greatest number.   
  
  
**Task 11:**Wap to check if check week days

1  ===> sunday

2 ===> monday

So on

8 and above ===> invalid input

public class Task11 {

public static void main(String[] args) {

int day = 1; // You can change this value (1 to 7)

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.");

}

}}  
output:- Sunday  
 **Task 12:**Wap to check loginid and password validation

Hint use while loop

Program:-  
public class LoginValidation {

public static void main(String[] args) {

// Correct login details

String correctId = "Ranga Srinivas";

String correctPwd = "123456789";

// These are used to store user input (we are simulating input here)

String enteredId = "";

String enteredPwd = "";

// To count how many times the user tried

int attempt = 1;

// Keep checking until the user gives the correct login ID and password

while (!enteredId.equals(correctId) || !enteredPwd.equals(correctPwd)) {

System.out.println("Attempt " + attempt);

// First time user enters wrong info

if (attempt == 1) {

enteredId = "WrongUser"; // wrong ID

enteredPwd = "wrongpass"; // wrong password

}

// Second time user enters correct info

else {

enteredId = "Ranga Srinivas"; // correct ID

enteredPwd = "123456789"; // correct password

}

// If it's still wrong, show error

if (!enteredId.equals(correctId) || !enteredPwd.equals(correctPwd)) {

System.out.println("Invalid Login ID or Password. Please try again.\n");

}

// Increase the attempt count

attempt++;

}

// This will run only if login is correct

System.out.println("Login Successful! Welcome, Ranga Srinivas!");

}

}   
  
output:-  
Attempt 1

Invalid Login ID or Password. Please try again.

Attempt 2

Login Successful! Welcome, Ranga Srinivas!

**Task 13:**Same as above qn but use do while loop   
  
program:-  
public class LoginValidationDoWhile {

public static void main(String[] args) {

String correctId = "Ranga Srinivas";

String correctPwd = "123456789";

String enteredId = "";

String enteredPwd = "";

int attempt = 1;

do {

System.out.println("Attempt " + attempt);

// Simulating input: first attempt wrong, second attempt correct

if (attempt == 1) {

enteredId = "WrongUser";

enteredPwd = "wrongpass";

} else {

enteredId = "Ranga Srinivas";

enteredPwd = "123456789";

}

if (!enteredId.equals(correctId) || !enteredPwd.equals(correctPwd)) {

System.out.println("Invalid Login ID or Password. Please try again.\n");

}

attempt++;

} while (!enteredId.equals(correctId) || !enteredPwd.equals(correctPwd));

System.out.println("Login Successful! Welcome, Ranga Srinivas!");

}

}

Output:-  
Attempt 1

Invalid Login ID or Password. Please try again.

Attempt 2

Login Successful! Welcome, Ranga Srinivas!   
  
  
**Task 14:**Wap to display numbers from 10 to 1 .. skip 7 and 5.

Program:-  
public class DisplayNumbers {

public static void main(String[] args) {

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

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

continue; // Skip the numbers 7 and 5

}

System.out.println(i);

}

}

}   
  
Output:-  
10

9

8

6

4

3

2

1   
**Task 15:**Arrays:

Try the below code and display the output…

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

}

}

Output:-  
aeiou

Meena

Reena

4

Exception in thread "main" java.lang.ArrayIndexOutOfBoundsException: Index 4 out of bounds for length 4

at Arrays.Demo01.main(Demo01.java:14)   
  
**Task 16:**package StringHandling;

public class Demo01 {

public static void main(String[] args) {

String str1 = "Java Strings "; // String literal

String str2 = new String(str1); // Creates a new String object with the content of str1

String str3 = new String("are easy to learn "); // New String object with the literal content

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

String str4 = new String(ch); // Create String from char array

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

}

}   
  
output:-  
Java Strings

Java Strings

are easy to learn

String  
  
  
**Task 17:**package Enumerations;

enum color {

red, blue, green, yellow

}

public class Demo01 {

public static void main(String[] args) {

color c1 = color.yellow;

System.out.println(c1);

}

}  
  
output:-  
yellow  
  
  
**Task 18:**Getter and setter

Create a program name Person.java   
  
Program:-   
public class Person {

// Private variables (encapsulation)

private String name;

private int age;

// Getter method for name

public String getName() {

return name;

}

// Setter method for name

public void setName(String name) {

this.name = name;

}

// Getter method for age

public int getAge() {

return age;

}

// Setter method for age

public void setAge(int age) {

if(age > 0) { // simple validation

this.age = age;

} else {

System.out.println("Age must be positive.");

}

}

}  
public class Task18 {

public static void main(String[] args) {

Person p = new Person();

// Set values

p.setName("Ranga Srinivas");

p.setAge(26);

// Get and display values

System.out.println("Name: " + p.getName());

System.out.println("Age: " + p.getAge());

}

}   
  
output:-  
Name: Ranga Srinivas

Age: 26

**Task 19:**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);

  }

}

output:- myObj.name = "John"; // ERROR: 'name' has private access in Person

System.out.println(myObj.name); // ERROR: 'name' has private access in Person