**NAME :TALASANIYA NAVDIP R**

**Class -SY D**

**ROLL NO :35**

**Subject : Programming with Java**

1. **Write a program to print your first\_name, middle\_name, Last\_name, DOB, class, Div, contact\_number, email\_id.**
2. public class PersonalInformation {
3. public static void main(String[] args) {
4. String firstName = "NAVDIP";
5. String middleName = "ABC";
6. String lastName = "TALASANIYA";
7. String dob = "09/04/2004";
8. String className = "SEM 4";
9. String div = "D";
10. String contactNumber = "9687013404";
11. String emailId = "abc.doe@example.com";
12. System.out.println("First Name: " + firstName);
13. System.out.println("Middle Name: " + middleName);
14. System.out.println("Last Name: " + lastName);
15. System.out.println("Date of Birth: " + dob);
16. System.out.println("Class: " + className);
17. System.out.println("Division: " + div);
18. System.out.println("Contact Number: " + contactNumber);
19. System.out.println("Email ID: " + emailId);
20. }
21. }
22. OUTPUT
23. First Name: NAVDIP
24. Middle Name: ABC
25. Last Name: TALASANIYA
26. Date of Birth: 09/04/2004
27. Class: SEM 4
28. Division: D
29. Contact Number: 9687013404
30. Email ID: abc.doe@example.com

**2. Write a program to demonstrate all data types.**

public class DataTypes {

    public static void main(String[] args) {

        int integer = 5;

        float floatNumber = 5.5f;

        double doubleNumber = 10.99;

        char character = 'A';

        String text = "Hello, World!";

        boolean isTrue = true;

        long longNumber = 100000L;

        byte byteValue = 127;

        short shortValue = 32767;

        System.out.println("Integer: " + integer);

        System.out.println("Float: " + floatNumber);

        System.out.println("Double: " + doubleNumber);

        System.out.println("Char: " + character);

        System.out.println("String: " + text);

        System.out.println("Boolean: " + isTrue);

        System.out.println("Long: " + longNumber);

        System.out.println("Byte: " + byteValue);

        System.out.println("Short: " + shortValue);

    }

}

OUTPUT

Integer: 5

Float: 5.5

Double: 10.99

Char: A

String: Hello, World!

Boolean: true

Long: 100000

Byte: 127

Short: 32767

**3. Write a program to demonstrate all types of literals.**

class Literals {

    public static void main(String[] args) {

        int intLiteral = 100;

        double doubleLiteral = 5.5;

        char charLiteral = 'A';

        boolean booleanLiteral = true;

        String stringLiteral = "Java";

        float floatLiteral = 3.14f;

        long longLiteral = 10000000000L;

        System.out.println("Integer Literal: " + intLiteral);

        System.out.println("Double Literal: " + doubleLiteral);

        System.out.println("Char Literal: " + charLiteral);

        System.out.println("Boolean Literal: " + booleanLiteral);

        System.out.println("String Literal: " + stringLiteral);

        System.out.println("Float Literal: " + floatLiteral);

        System.out.println("Long Literal: " + longLiteral);

    }

}

OUTPUT

Integer Literal: 100

Double Literal: 5.5

Char Literal: A

Boolean Literal: true

String Literal: Java

Float Literal: 3.14

Long Literal: 10000000000

**4. Write a program to calculate area of circle.**

import java.util.Scanner;

class AreaOfCircle {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the radius of the circle: ");

        double radius = sc.nextDouble();

        double area = Math.PI \* radius \* radius;

        System.out.println("Area of the circle: " + area);

    }

}

OUTPUT

Enter the radius of the circle: 10

Area of the circle: 314.1592653589793

**5. Write a program to perform all arithmetic operations. (+, - ,\*, /, %)**

import java.util.Scanner;

public class ArithmeticOperations {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

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

        double num1 = sc.nextDouble();

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

        double num2 = sc.nextDouble();

        System.out.println("Addition: " + (num1 + num2));

        System.out.println("Subtraction: " + (num1 - num2));

        System.out.println("Multiplication: " + (num1 \* num2));

        System.out.println("Division: " + (num1 / num2));

        System.out.println("Modulus: " + (num1 % num2));

    }

}

OUTPUT

Enter the first number: 10

Enter the second number: 10

Addition: 20.0

Subtraction: 0.0

Multiplication: 100.0

Division: 1.0

Modulus: 0.0

**6. Write a program to calculate area of triangle.**

import java.util.Scanner;

public class AreaOfTriangle {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the base of the triangle: ");

        double base = sc.nextDouble();

        System.out.print("Enter the height of the triangle: ");

        double height = sc.nextDouble();

        double area = 0.5 \* base \* height;

        System.out.println("Area of the triangle: " + area);

    }

}

OUTPUT

Enter the base of the triangle: 10

Enter the height of the triangle: 10

Area of the triangle: 50.0

**7. Write a program to perform following arithmetic expression. a. 10\*10/5+3-1\*4/2**

public class ArithmeticExpression

 {

    public static void main(String[] args)

    {

        int result = 10 \* 10 / 5 + 3 - 1 \* 4 / 2;

        System.out.println("Result of the expression: " + result);

    }

}

OUTPUT

Result of the expression: 21

**8. Write a program to check whether the number is positive or negative or zero.**

import java.util.Scanner;

public class CheckPositiveNegativeZero {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

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

        int num = sc.nextInt();

        if (num > 0) {

            System.out.println("The number is positive.");

        } else if (num < 0) {

            System.out.println("The number is negative.");

        } else {

            System.out.println("The number is zero.");

        }

    }

}

OUTPUT

Enter a number: 0

The number is zero.

**9. Write a program that takes a number (1-7) and prints the corresponding day of the week using a switch statement.**

import java.util.Scanner;

public class DayOfWeek {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter a number between 1 and 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. Please enter a number between 1 and 7.");

        }

    }

}

OUTPUT

Enter a number between 1 and 7: 1

Sunday

**10. Write a program to print 1 to 100 number using do…while loop.**

public class PrintNumbers {

    public static void main(String[] args) {

        int i = 1;

        do {

            System.out.println(i);

            i++;

        } while (i <= 100);

    }

}

OUTPUT

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

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100

**11. Write a program to print following pattern.**

public class NumberPattern {

    public static void main(String[] args)

    {

        for (int i = 1; i <= 5; i++)

         {

            for (int j = 1; j <= i; j++)

             {

                System.out.print(j);

            }

            System.out.println();

        }

    }

}

/\*OUTPUT

1

12

123

1234

12345\*/

public class AlphabetPattern

 {

    public static void main(String[] args)

     {

        for (int i = 0; i < 5; i++)

         {

            char ch = (char) ('A' + i);

            for (int j = 0; j <= i; j++)

             {

                System.out.print(ch);

            }

            System.out.println();

        }

    }

}

/\*OUTPUT

A

BB

CCC

DDDD

EEEEE\*/

public class AlphabetPattern

 {

    public static void main(String[] args)

     {

        int rows = 5;

        for (int i = 1; i <= rows; i++)

         {

            for (char ch = 'A'; ch < 'A' + i; ch++)

             {

                System.out.print(ch);

            }

            System.out.println("A");

        }

    }

}