Name: AKELLA VENKATA SURYANARAYANA MURTHY **email:** murthyakella2003@gmail.com

1)Task: Create a program that accepts age, height, and weight of a person and prints them with appropriate data types.

Sample Input: **Sample Output:**

Age: 25 Age: 25

Height: 5.9 Height: 5.9

Weight: 68.5 Weight: 68.5

A) package Day2java;

import java.util.Scanner;

public class Assignment_1 {

public static void main(String[] args) {

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

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

System.***out***.print("Age: ");

int age = sc.nextInt();

System.***out***.print("Height: ");

double height = sc.nextDouble();

System.***out***.print("weight: ");

float weight = sc.nextFloat();

System.***out***.println("Age: "+age);

System.***out***.println("Height: "+height);

System.***out***.println("weight: "+weight);

sc.close();

}

}

2) Task: Declare and initialize different types of variables to store a student's information: ID, name, marks, and grade. Print them.

Sample Input:

ID: 101

Name: Arun

Marks: 89.5

Grade: A

Sample Output:

Student ID: 101

Name: Arun

Marks: 89.5

Grade: A

Ans)

```
package Day2java;
import java.util.Scanner;
public class Assiginment_2 {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		System.out.println("ID: ");
		int id = sc.nextInt();
		System.out.println("Name: ");
		String name = sc.nextLine();
		sc.next();
		System.out.println("marks: ");
		double marks = sc.nextDouble();
		System.out.println("Grade: ");
		char grade = sc.next().charAt(0);
		System.out.println("ID: "+id);
		System.out.println("Name: "+name);
		System.out.println("marks: "+marks);
		System.out.println("Grade: "+grade);
		sc.close();
```

```
    }
}
```

3) Task: Accept two numbers and perform arithmetic, relational, and logical operations on them.

Sample Input:	**Sample Output:**
Number1: 10	Addition: 30
Number2: 20	Greater number: 20 Are both positive? True

A)package Day2java;

```
public class Assignment_3 {


    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int num1=10,num2=15;
        System.out.println("Addition: "+(num1+num2));
        if(num1>num2)
        {
            System.out.println("Greater number: "+num1);
        }
        if(num1<num2)
        {
            System.out.println("Greater number: "+num2);
        }
        System.out.println("Are both positive  ?"+((num1>0)&&(num2>0)));


    }
```

}

4) String Concatenation Task: Create a greeting message using first name and last name entered by the user.

Sample Input:

First Name: Ravi

Last Name: Kumar

Output

Hello, Ravi Kumar! Welcome to the system.

A) package Day2java;

```
   public class Assignment_4 {

        public static void main(String[] args) {

                // TODO Auto-generated method stub

                String first = "Murthy";

                String last = "Akella";

                String result = "Hello, "+first+" "+last+"!"+" "+"Welcome to the system.";

                System.out.println(result);

        }
}
```

5) Task: Accept a sentence and reverse it using StringBuilder.

Sample Input: **Sample Output:**

Input: Hello Java Learners Reversed: srenraeL avaJ olleH

A)

```
package Day2java;

public class Assignment_5 {

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

```
		// TODO Auto-generated method stub
		StringBuilder sb = new StringBuilder("Hello! java learners");
		sb.reverse();
		System.out.println("Reversed string: "+sb.toString());
	}
}
```

6) Task: Count how many times a specific character appears in a string.

Sample Input: **Sample Output:** Character 'a' appears 3 times.

String: banana

Character: a

A)

```
package Day2java;
public class Assignment_6 {
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		String name = "banana";
		char ch = 'a';
		int count=0;
		for(int i=0;i<name.length();i++)
		{
			if(name.charAt(i)==ch)
			{
				count++;
			}
		}
		System.out.println("number of occurances of a character: "+count);
```

```
        }
}
```

7) Task: Display the current date and format it as DD-MM-YYYY. Also, show a formatted currency value.

Sample Input:	**Sample Output:**
Date: [current system date]	Current Date: 20-07-2025
Amount: 12345.678	Formatted Amount: ₹12,345.68

Ans)

```
package assignmentsjava2;

import java.time.LocalDate;

import java.time.format.DateTimeFormatter;

import java.text.NumberFormat;

import java.util.Locale;

public class task7 {

        public static void main (String [] args) {

        LocalDate currentDate = LocalDate.now();

         DateTimeFormatter formatter = DateTimeFormatter.ofPattern("dd-MM-yyyy");

         String formattedDate = currentDate.format(formatter);

         double amount = 12345.678;

         NumberFormat currencyFormatter = NumberFormat.getCurrencyInstance(new

        Locale ("en", "IN"));

         String formattedAmount = currencyFormatter.format(amount);


         System.out.println("Current Date: " + formattedDate);

         System.out.println("Formatted Amount: " + formattedAmount);

        }

}
```

8) Task: Based on a number entered, print whether it's positive, negative, or zero.

Sample Input: **Sample Output**

Number: -5: The number is negative.

Ans)

```
package Day2java;
import java.util.Scanner;
public class Assignment_8 {
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner sc = new Scanner(System.in);
		System.out.println("Number: ");
		int num = sc.nextInt();
		if(num>0)
		{
			System.out.println("It is positive number");
		}
		if(num<0)
			System.out.println("It is negative number");
		else
			System.out.println("It is zero");
		sc.close();
	}
}
```

9) Task: Accept marks and display the grade using if-else.

Sample Input: **Sample Output:**

Marks: 76 Grade: B

Ans)

```
package Day2java;
import java.util.Scanner;
public class Assignment_9 {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		System.out.print("Marks: ");
		int marks = sc.nextInt();
		if(marks>=90)
		{
			System.out.println("Grade A+");
		}
		else if(marks>=80&&marks<90)
		{
			System.out.println("Grade A");
		}
		else if(marks>=70&&marks<80)
		{
			System.out.println("Grade B");
		}
		else if(marks>=60&&marks<70)
		{
			System.out.println("Grade C");
		}
```

```
            else if(marks>=50&&marks<60)
            {
                System.out.println("Grade D");
            }
            else if(marks>=40&&marks<50)
            {
                System.out.println("Grade E");
            }
            else
            {
                System.out.println("Fail");
            }
            sc.close();
        }
}
```

10) Task: Build a simple calculator using switch to perform operations (+, -, *, /).

Sample Input:	**Sample Output:**
Number1: 10	Result: 50
Number2: 5	
Operation: *	

A)

```
package Day2java;
import java.util.Scanner;
public class Assignment_10 {
    public static void main(String[] args) {
        // TODO Auto-generated method stub
```

```
Scanner sc = new Scanner(System.in);
System.out.print(" number 1: ");
int num1 = sc.nextInt();
System.out.print(" number 2: ");
int num2 = sc.nextInt();
System.out.print(" operator: ");
char ch = sc.next().charAt(0);
switch(ch)
{       case '+':
                        System.out.println("Addition: "+(num1+num2));
                        break;
          case '-':
                        System.out.println("subtraction: "+(num1-num2));
                        break;
          case '*':
                        System.out.println("multiplication: "+(num1*num2));
                        break;
          case '/':
                        System.out.println("division: "+(num1/num2));
                        break;
          case '%':
                        System.out.println("modulo division: "+(num1%num2));
                        break;
          default:
                        System.out.println("invalid operator");
                        break;
```

```
        }
        sc.close();
    }
}
```

11) Task: Print the first N even numbers using a loop.

Sample Input: **Sample Output:**

N = 5 0 2 4 6 8

A)

```
package Day2java;
import java.util.Scanner;
public class Assignment_11 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("number: ");
        int num = sc.nextInt();
        System.out.print("the even numbers are: ");
        int i=0;
        //System.out.print(i+" ");
        while(num>0)
        {
           System.out.print(i+" ");
           i=i+2;
                num--;
        }
        sc.close();
    }
```

}

12) Task: Accept 5 numbers, store them in an array, and display their average.

Sample Input: **Sample Output:**

Numbers: 10, 20, 30, 40, 50 Average: 30.0

A)

```
package Day2java;
public class Assignment_12 {
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int arr[] = {10,20,30,40,50};
		int sum=0;
		double avg = 0;
		for(int i=0;i<arr.length;i++)
		{
			sum = sum+arr[i];
		}
		avg = (double)sum/(arr.length);
		System.out.println("Average of numbers: "+avg);
	}
}
```

13) Task: Create an enum for days of the week. Print a message depending on the day.

Sample Input: **Sample Output:**

Day: MONDAY Start of the work week!

Ans)

```
package Day2java;
	import java.util.Scanner;
```

```
public class Assignment_13 {
    enum Day {
        MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY, SATURDAY, SUNDAY
    }
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Day: ");
        String day = sc.nextLine().toUpperCase();
            Day day = Day.valueOf(input);
            switch (day) {
                case MONDAY:
                    System.out.println("Start of the work week!");
                    break;
                case TUESDAY:
                case WEDNESDAY:
                case THURSDAY:
                    System.out.println("Midweek days!");
                    break;
                case FRIDAY:
                    System.out.println("Almost weekend!");
                    break;
                case SATURDAY:
                case SUNDAY:
                    System.out.println("Weekend vibes!");
                    break;
            }
```

```
    }
}
```

14) Task: Create a student class with fields for name and marks. Create an object and display its data.

Sample Input:

Name: Riya

Marks: 87

Sample Output:

Student Name: Riya

Marks: 87

```
package Day2java;
import java.util.Scanner;
public class StudentInfo {
    class Student {
        String name;
        int marks;
        Student(String name, int marks) {
            this.name = name;
            this.marks = marks;
        }
        void display() {
            System.out.println("Student Name: " + name);
            System.out.println("Marks: " + marks);
        }
    }
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Name: ");
        String name = sc.nextLine();
```

```
        System.out.print("Marks: ");
        int marks = sc.nextInt();
        Student student = new Student(name, marks);
        student.display();
       sc.close();
    }
}
```

15) Task: Create a class Employee and a subclass Manager that extends Employee and adds department information.

Sample Input:

Name: Raj

Salary: 50000

Department: Sales

Sample Output:

Name: Raj

Salary: 50000

Department: Sales

A)

```
package Day2java;
import java.util.Scanner;
class Employee {
    String name;
    int salary;
    Employee (String name, int salary) {
        this.name = name;
        this. Salary = salary;
    }
    void display() {
        System.out.println("Name: " + name);
        System.out.println("Salary: " + salary);
    }
```

```
}
class Manager extends Employee {
   String department;
   Manager (String name, int salary, String department) {
      super (name, salary);
      this.department = department;
   }
   @Override
   void display () {
      super.display();
      System.out.println("Department: " + department);
   }
}
public class Assignment_15 {
   public static void main (String[] args) {
      Scanner sc = new Scanner (System.in);
      System.out.print("Name: ");
      String name = sc .nextLine();
      System.out.print("Salary: ");
      int salary = sc.nextInt();
      sc.nextLine();
      System.out.print("Department: ");
      String department = sc .nextLine();
      Manager manager = new Manager (name, salary, department);
      manager.display();
   }  }
```