DAY 2 – Assignment

1.Java Program: Are you above 18 years old?

```
package day_2;
 import java.util.Scanner;
 public class EligibleAge {
 public static void main(String[] args) {
  Scanner input = new Scanner(System.in);
  System.out.print("Please enter your age: ");
  int age = input.nextInt();
  if (age > 18) {
            System.out.println("You are eligible to vote.");
         } else {
            System.out.println("You are not eligible to vote
yet.");
            }
  input.close();
     }

 }
```

Output:

```
Please enter your age: 22
 You are eligible to vote.
```

2.Java Program: Print Multiplication Table Using for Loop

```
package day_2;
 import java.util.Scanner;
public class MultiplicationTable {
 public static void main(String[] args) {
    Scanner input = new Scanner(System.in);
    System.out.print("Enter a number to print its multiplication table: ");
    int number = input.nextInt();
```

```
   System.out.println("Multiplication table for " + number + ":");
   for (int i = 1; i <= 10; i++) {
           int result = number * i;
           System.out.println(number + " x " + i + " = " + result);
       }
   input.close();

 }

}
```

Output:

```
Enter a number to print its multiplication table: 5
Multiplication table for 5:
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

3.Java Program: Character, String, and Boolean Input

Example

```
package day_2;
import java.util.Scanner;
public class UserInputSummary {
 public static void main(String[] args) {
  // TODO Auto-generated method stub
        Scanner scanner = new Scanner(System.in);
```

```
        System.out.print("Enter a single character: ");
        char character = scanner.next().charAt(0);
        System.out.print("Enter your name: ");
        String name = scanner.next();
        System.out.print("Do you like programming? (true/false): ");
        boolean likesProgramming = scanner.nextBoolean();
        System.out.println("\n--- User Input Summary ---");
        System.out.println("Character entered: " + character);
        System.out.println("Name entered: " + name);
        System.out.println("Likes programming: " + likesProgramming);
        if (likesProgramming) {
            System.out.println("Great! Keep coding, " + name + "!");
        } else {
            System.out.println("No worries! Programming isn't for everyone.");
        }
        scanner.close();
    }
}
```

Output:

```
Enter a single character: s
 Enter your name: sudha
 Do you like programming? (true/false): true--- User Input Summary --
Character entered: s
 Name entered: sudha
 Likes programming: true
 Great! Keep coding, sudha!
```

4.Simple Banking Operations using switch Case

```
package day_2;
 import java.util.Scanner;
 public class SimpleBanking {
 public static void main(String[] args) {
```

```
Scanner scanner = new Scanner(System.in);
    int balance = 0;
    int choice;
    System.out.println("Welcome to ABC Bank");
    while (true) {
      System.out.println("\n1. Check Balance");
      System.out.println("2. Deposit Money");
      System.out.println("3. Withdraw Money");
      System.out.println("4. Exit");
      System.out.print("Enter your choice: ");
      choice = scanner.nextInt();
      switch (choice) {
        case 1:
          System.out.println("Your current balance is: " + balance);
          break;
        case 2:
₹
          System.out.print("Enter amount to deposit: ");
          int deposit = scanner.nextInt();
          if (deposit > 0) {
            balance += deposit;
            System.out.println("Deposit successful!");
          } else {
            System.out.println("Invalid deposit amount.");
          }
          break;
        case 3:
          System.out.print("Enter amount to withdraw: ");
          int withdraw = scanner.nextInt();
          if (withdraw > 0 && withdraw <= balance) {
            balance -= withdraw;
```

```
                System.out.println("Withdrawal successful!");
            } else if (withdraw > balance) {
                System.out.println("Insufficient balance.");
            } else {
                System.out.println("Invalid withdrawal amount.");
            }
            break;
        case 4:
            System.out.println("Thank you for using ABC Bank!");
            scanner.close();
            return;
        default:
            System.out.println("Invalid choice. Please try again.");
            }
    }
}
}
```

Output:

```
Welcome to ABC Bank
1. Check Balance
2. Deposit Money
3. Withdraw Money
4. Exit
Enter your choice: 1
Your current balance is: 0
1. Check Balance
2. Deposit Money
3. Withdraw Money
4. Exit
Enter your choice: 2
₹
```

Enter amount to deposit: 200

Deposit successful!

1. Check Balance

2. Deposit Money

3. Withdraw Money

4. Exit

Enter your choice: 2000

Invalid choice! Please try again.

1. Check Balance

2. Deposit Money

3. Withdraw Money

4. Exit

Enter your choice: 3

Enter amount to withdraw: 200

Withdrawal successful!

1. Check Balance

2. Deposit Money

3. Withdraw Money

4. Exit

Enter your choice: 3

Enter amount to withdraw: 5000

Insufficient balance!

1. Check Balance

2. Deposit Money

3. Withdraw Money

4. Exit

Enter your choice:

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

```
package day_2;

import java.util.Scanner;
```

```
public class PrimitiveData {
 public static void main(String[] args) {
Scanner scanner = new Scanner(System.in);
System.out.print("Enter Age: ");
int age = scanner.nextInt();
System.out.print("Enter Height: ");
float height = scanner.nextFloat();
System.out.print("Enter Weight: ");
double weight = scanner.nextDouble();
System.out.println("\nAge: " + age);
System.out.println("Height: " + height);
System.out.println("Weight: " + weight);
scanner.close();
}
}
```

Output:

```
Enter Age: 22
 Enter Height: 4.5
 Enter Weight: 45
 Age: 22
 Height: 4.5
 Weight: 45.0
```

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

```
package day_2;
 public class StudentInfoVaria {
 public static void main(String[] args) {
int id = 101;
String name = "Sudha";
double marks = 98.8;
char grade = 'A';
```

```
System.out.println("Student ID: " + id);
System.out.println("Name: " + name);
System.out.println("Marks: " + marks);
System.out.println("Grade: " + grade);
}
}
```

Output:

```
Student ID: 101
 Name: Sudha
 Marks: 98.8
 Grade: A
```

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

```
package day_2;
 import java.util.Scanner;
public class Operators {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter number1: ");
int num1 = sc.nextInt();
System.out.print("Enter number2: ");
int num2 = sc.nextInt();
System.out.println("Addition: " + (num1 + num2));
System.out.println("Greater number: " + (num1 > num2 ? num1 : num2));
System.out.println("Are both positive? " + (num1 > 0 && num2 > 0));
sc.close();
}
}
```

Output:

```
Enter number1: 20
 Enter number2: 10
```

Addition: 30

Greater number: 20

Are both positive? true

8.Task: Create a greeting message using first name and last name entered by the user.

```
package day_2;
import java.util.Scanner;
public class Message {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter First Name: ");
String firstName = sc.nextLine();
System.out.print("Enter Last Name: ");
String lastName = sc.nextLine();
String welcomeMessage = "Hello " + firstName + " " + lastName + "!";
System.out.println(welcomeMessage);
sc.close();
}
}
```

Output:

Enter First Name: Raga

Enter Last Name: Sudha

Hello Raga Sudha!

9.Task: Accept a sentence and reverse it using StringBuilder

```
package day_2;
import java.util.Scanner;
public class StringBuilderExample {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter a sentence: ");
String input = sc.nextLine();
```

```
StringBuilder sb = new StringBuilder(input);
System.out.println("Reversed: " + sb.reverse());
sc.close();
}
}
```

Output:

```
Enter a sentence: Hello Namaskaram
 Reversed: maraksamaN olleH
```

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

```
package day_2;
 import java.util.Scanner;
public class CharacterCount {
 public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter a string: ");
String str = sc.next();
System.out.print("Enter character to count: ");
char ch = sc.next().charAt(0);
long count = str.chars().filter(c -> c == ch).count();
System.out.println("Character '" + ch + "' appears " + count + " times.");
sc.close();
}
}
```

Output:

```
Enter a string: sudha
 Enter character to count: s
 Character 's' appears 1 times.
```

11.Task: Display the current date and format it as DD-MMYYYY.

```
package day_2;
 import java.text.SimpleDateFormat;
import java.util.Date;
```

```
public class CurrentDate {
public static void main(String[] args) {
Date date = new Date();
SimpleDateFormat sdf = new SimpleDateFormat("dd-MM-yyyy");
System.out.println("Current Date: " + sdf.format(date));
}
}
```

Output:

Current Date: 24-07-2025

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

```
package day_2;
 import java.util.Scanner;
public class NumberCheck {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter a number: ");
int number = sc.nextInt();
if (number > 0) System.out.println("The number is positive.");
else if (number < 0) System.out.println("The number is negative.");
else System.out.println("The number is zero.");
sc.close();
}
}
```

Output:

Enter a number: 69

The number is positive.

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

```
package day_2;
 import java.util.Scanner;
public class Grade {
```

```
 public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter marks: ");
int marks = sc.nextInt();
if (marks >= 90) System.out.println("Grade: A");
else if (marks >= 75) System.out.println("Grade: B");
else if (marks >= 60) System.out.println("Grade: C");
else System.out.println("Grade: D");
sc.close();
}
}
```

Output:

```
Enter marks: 69
 Grade: C
```

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

```
package day_2;
 import java.util.Scanner;
public class Arithmetic {
 public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter number1: ");
double num1 = sc.nextDouble();
System.out.print("Enter number2: ");
double num2 = sc.nextDouble();
System.out.print("Enter operation (+, -, *, /): ");
char op = sc.next().charAt(0);
switch (op) {
case '+': System.out.println("Result: " + (num1 + num2)); break;
case '-': System.out.println("Result: " + (num1 - num2)); break;
case '*': System.out.println("Result: " + (num1 * num2)); break;
```

```
case '/': System.out.println("Result: " + (num2 != 0 ? (num1 / num2) :
"Cannot divide by zero")); break;
default: System.out.println("Invalid operation");
}
sc.close();
}
}
```

Output:

```
Enter number1: 20
 Enter number2: 10
 Enter operation (+, -, *, /): +
 Result: 30.0
```

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

```
package day_2;
 import java.util.Scanner;
public class EvenLoop {
 public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter N: ");
int n = sc.nextInt();
for (int i = 0; i < n * 2; i += 2) {
System.out.print(i + " ");
}
sc.close();
}
}
```

Output:

```
Enter N: 10
 0 2 4 6 8 10 12 14 16 18
```

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

```
package day_2;
```

```
import java.util.Scanner;
public class Array_Ave {

 public static void main(String[] args) {
  Scanner sc = new Scanner(System.in);
       int[] arr = new int[5];
       int sum = 0;
       System.out.println("Enter 5 numbers:");
       for (int i = 0; i < 5; i++) {
          arr[i] = sc.nextInt();
          sum += arr[i];
       }
       System.out.println("Average: " + (sum / 5.0));
       sc.close();

 }

}
```

Output:

```
Enter 5 numbers:
 2
 4
 5
 6
 7
 Average: 4.8
```

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

```
package day_2;
 enum WeekDay {
```

```
  MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY,
  SATURDAY, SUNDAY
}
public class EnumDay {
  public static void main(String[] args) {
    WeekDay today = WeekDay.SUNDAY;
    switch (today) {
      case MONDAY:
        System.out.println("New week, new goals!");
        break;
      case FRIDAY:
        System.out.println("Weekend is near!");
        break;
      case SUNDAY:
        System.out.println("Time to relax and recharge.");
        break;
      default:
        System.out.println("It's a regular weekday.");
    }
  }
}
```

Output:

Time to relax and recharge.