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

```java
package javaprograms;

import java.util.Scanner;

public class vote {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner n = new Scanner(System.in);
        System.out.println("Enter your age: ");
        int vote = n.nextInt();
        if(vote>18) {
            System.out.println("you are eligible to vote");
        }
        else if (vote < 18)
            System.out.println("not eligible to vote");
        n.close();
    }

}
```

```
<terminated> vote [Java Applicatio
Enter your age:
32
you are eligible to vote
```

2. Java Program: Print Multiplication Table Using for Loop

```java
package javaprograms;

import java.util.Scanner;

public class multable {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner s = new Scanner(System.in);
        System.out.println("Enter a number: ");
        int num = s.nextInt();
        for (int i=1;i<=10;i++)
        {
            System.out.println(num+"x"+i+"="+(num*i));
        }
        s.close();
    }

}
```

```
Enter a number:
5
5x1=5
5x2=10
5x3=15
5x4=20
5x5=25
5x6=30
5x7=35
5x8=40
5x9=45
5x10=50
```

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

```java
package javaprograms;

import java.util.Scanner;

public class thirdtask {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter a single char");
        char ch = scan.next().charAt(0);
        scan.nextLine();
        System.out.println("Enter your name");
        String s = scan.nextLine();
        System.out.println("Do you like coding? (true/false):");
        boolean likescode = scan.nextBoolean();
        System.out.println();
        System.out.println("--- USER INPUT SUMMARY ---");
        System.out.println("Character entered: "+ch);
        System.out.println("Name entered: "+s);
        System.out.println("Likes coding: "+likescode);
        System.out.println("great! keep coding, "+s+"!");

    scan.close();

    }
```

```
Enter a single char
a
Enter your name
rajni
Do you like coding? (true/false):
true

--- USER INPUT SUMMARY ---
Character entered: a
Name entered: rajni
Likes coding: true
great! keep coding, rajni!
```

4. Simple Banking Operations using switch Case

Create a Java program that simulates simple banking operations like checking balance, depositing money, and withdrawing money using a switch case statement.

```java
package operators;
import java.util.Scanner;
public class SwitchSample {
    public static void main(String[] args) {
        Scanner s = new Scanner(System.in);
        System.out.println("wlcome to abc bank");
        System.out.println("1. check balance");
        System.out.println("2. deposit money");
        System.out.println("3. withdraw money");
        System.out.println("4. exit");

        int bal = 0;
        int ch;
        do  {
        System.out.println("enter your choice");
        ch = s.nextInt();
        switch(ch) {
            case 1:
                System.out.println("your balance is "+bal);
                break;
            case 2:
                System.out.println("enter amount to deposit ");
                int dep = s.nextInt();
                bal = bal+dep;
                System.out.println("dep success");
                break;
            case 3:
                System.out.println("enter amount to withdraw");
                int draw = s.nextInt();
                bal = bal-draw;
                System.out.println("withdraw sucess");
                break;
            case 4:
                System.out.println("thank you for using abc bank");
                break;
        }
    } while(ch != 4); s.close();
}
```

```
wlcome to abc bank
1. check balance
2. deposit money
3. withdraw money
4. exit
enter your choice
1
your balance is 0
enter your choice
2
enter amount to deposit
345
dep success
enter your choice
1
your balance is 345
enter your choice
3
enter amount to withdraw
5
withdraw sucess
enter your choice
1
your balance is 340
enter your choice
4
thank you for using abc bank
```

✅ 1. String Concatenation 🧩 Scenario: Welcome Message Generator

Task: Create a program that takes user input for first name and last name and displays a welcome message using string concatenation.

```java
import java.time.LocalDateTime;
import java.time.LocalTime;
import java.time.format.DateTimeFormatter;
import java.util.Scanner;

public class task3 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        Scanner scan = new Scanner(System.in);

        // concat
        System.out.println("enter the first name");
        String one = scan.nextLine();
        System.out.println("enter the last name");
        String two = scan.nextLine();
        System.out.println("welcome "+ one.concat(two)+" !!");
```

```
<terminated> task3 [Java Appli
enter the first name
pavan
enter the last name
karthik
welcome pavankarthik !!
```

✅ 2. StringBuilder🧩 Scenario: Efficient String Reversal

Task: Write a program to reverse a user-entered sentence using StringBuilder.

```
StringBuilder sb = new StringBuilder(one);
sb.reverse();
System.out.println("reversed string: "+sb);
```

```
reversed string: navap
```

✅ 3. String API 🧩 Scenario: Email Validation System

Task: Use String methods to check if the entered email is valid (contains @ and ends with .com).

```
//email
System.out.println();
String mail = scan.nextLine();

if (mail.contains("@") && mail.endsWith(".com"))
    System.out.println("valid email");
else {
    System.out.println("Invalid email");
}
```

```
Enter your mail:
rajap@gmail.com
valid email
```

✅ 4. Date & ✅ 5. Time 🧩 Scenario: Display Current Date | Show Current Time of Login

Task: Create a program that displays the current system date in dd-MM-yyyy format.

Task: Display the current login time in HH:mm:ss format.

```
//date and time
LocalDate date = LocalDate.now();
LocalTime time = LocalTime.now();
LocalDateTime datetime = LocalDateTime.now();

DateTimeFormatter formatter = DateTimeFormatter.ofPattern("dd-MM-yyyy HH:mm:ss");
String formattedDateTime = datetime.format(formatter);
System.out.println("Formatted Date and Time: "+formattedDateTime);
```

```
Formatted Date and Time: 25-07-2025 20:47:53
```

✅ 6. Numeric Object 🧩 Scenario: Process Student Scores

Task: Convert string input to numeric types and perform calculations (average, max, etc.).

```
        // numeric object
        System.out.println("enter a subject score");
        String sub1 = scan.nextLine();
        System.out.println("enter another subject score");
        String sub2 = scan.nextLine();
        int num2 = Integer.parseInt(sub1);
        int num1 = Integer.parseInt(sub2);
        System.out.println();
    System.out.println("\nMath.max(x,y): "+Math.max(num1, num2));
```

```
Max(x,y): 45
Average: 42
```