Questions:

1. Write a Java program to demonstrate **implicit and explicit type casting** between int, double, and char.

2. Write a Java program to **add two characters** after converting them to integers (ASCII).

3. Write a Java program to **perform matrix addition / multiplication** (2D array).

4. Print the following pattern using nested loops:

   ```
        1
       121
      12321
     123432
   ```

5. Write a program, using switch-case:

   Pizza - ₹120

   Burger - ₹80

   Sandwich - ₹50

   Ask the user for quantity and calculate bill with 10% GST.

6. Create an example of **runtime polymorphism** with an array of parent class references holding child class objects and calling overridden methods.

7. Write a Java program to **prevent method overriding using private and static methods** – explain why static methods cannot be overridden.

8. Write a program where **parent reference holds child object and access only parent-specific methods** — with perspective to **upcasting and downcasting**.

9. Write a Java program to **simulate multiple inheritance using interfaces.**

10. Write a Java program to create a class CurrencyConverter that:

   - Has a static final double USD_TO_INR storing the conversion rate (e.g., 83.25).
   - Contains a **static method** toINR(double usdAmount) that returns the converted amount in INR.
   - Create a main method to convert **50 USD and 120 USD** into INR using the static method **without creating an object**.
   - Try modifying the value of USD_TO_INR in main and observe what happens.