

Aim:

You are working on a utility to transform numbers. Create an interface named **NumberTransformer** with a method **transform()** responsible for transforming and displaying the given number.

- Implement classes **SquareTransformer** and **CubeTransformer** that implement the **NumberTransformer** interface.
- **SquareTransformer** should transform and display the square of the input number, and **CubeTransformer** should transform and display the cube of the input number.

Note: The main class has been provided to you in the editor.

Source Code:

q23765/NumberTransform.java

```
package q23765;
import java.util.Scanner;
interface NumberTransformer {
    void transform(int number);
    // write your code here..
}
class SquareTransformer implements NumberTransformer{
    public void transform(int number){
        int square = number * number;
        System.out.println("Square: " + square);
    }
}
class CubeTransformer implements NumberTransformer{
    public void transform(int number){
        int cube = number * number * number;
        System.out.println("Cube: " + cube);
    }
}

public class NumberTransform {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter a number: ");
        int inputNumber = scanner.nextInt();

        NumberTransformer squareTransformer = new SquareTransformer();
        squareTransformer.transform(inputNumber);

        NumberTransformer cubeTransformer = new CubeTransformer();
        cubeTransformer.transform(inputNumber);

        scanner.close();
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter a number: 12
Square: 144
Cube: 1728

Test Case - 2
User Output
Enter a number: 5
Square: 25
Cube: 125