

1. LEAP YEAR

```
package test1;
import java.util.Scanner;
interface Leap1{
    public void leap();
}
class Year implements Leap1{
    public void leap(){
        Scanner s = new Scanner(System.in);
        System.out.print("Enter a year:");
        int year = s.nextInt();

        if(year %4==0 && year %100!=0 || year %400==0 ) {
            System.out.println(year + " is a leap year.");
        }
        else {
            System.out.println(year + " is not a leap year.");
        }
    }
}
public class Leap {

    public static void main(String[] args) {
        Year y = new Year();
        y.leap();

    }

}
```

OUTPUT:

Enter a year:2024
2024 is a leap year.

2. SQUARE ROOT

```
package test1;
import java.util.Scanner;
abstract class Square{
    abstract public void square();
}
class Root extends Square{
    public void square() {
        do {
            Scanner s = new Scanner(System.in);
            System.out.println("Enter a NUmber:");
            int n=s.nextInt();
            double square=Math.pow(n,0.5);
            System.out.println("root of " +n + "=" + square);
        }while (false);
    }
}

public class SquareRoot {
    public static void main(String[] args) {
        Root r = new Root();
        r.square();
    }
}
```

OUTPUT:

Enter a NUmber:

89

root of 89=9.433981132056603

3. REVERSE NUMBER

```
package test1;
```

```

import java.util.Scanner;
interface Rever{
    public void reverse();
}
class Reverse1 implements Rever{
    Scanner s = new Scanner(System.in);
    int n;
    int reverse=0,remainder;
    public void reverse() {
        System.out.println("Enter a number:");
        n= s.nextInt();
        while(n!=0) {

            remainder= n % 10;
            reverse =reverse *10 + remainder;
            n/=10;
        }
        System.out.println("Reverse Number:"+reverse);
    }
}

public class Reverse {

    public static void main(String[] args) {
        Reverse1 r = new Reverse1();
        r.reverse();

    }

}

```

OUTPUT:

Enter a number:

123435

Reverse Number:534321