

## Slip 16

### 10 Marks:

```
java
Copy code
import java.util.Scanner;

class Factorial {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a number to find its factorial: ");
        int number = sc.nextInt();
        long factorial = 1;

        for (int i = 1; i <= number; i++) {
            factorial *= i;
        }

        System.out.println("The factorial of " + number + " is: " +
factorial);
    }
}
```

### 20 Marks:

```
java
Copy code
import java.util.Scanner;

class Armstrong {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a number to check if it is an Armstrong
number: ");
        int number = sc.nextInt();
        int originalNumber = number;
        int result = 0;

        while (number != 0) {
            int remainder = number % 10;
            result += Math.pow(remainder, 3);
            number /= 10;
        }

        if (result == originalNumber) {
            System.out.println(originalNumber + " is an Armstrong number.");
        } else {
            System.out.println(originalNumber + " is not an Armstrong
number.");
        }
    }
}
```