PGM 1:
Even-Odd Classification

Aim:
Write a Java program to check whether an input number is even or odd.

Source Code:

```
  GNU nano 6.2
import java.util.Scanner;

public class EvenOdd{
        public static  void main(String[] args){
                Scanner scanner = new Scanner(System.in);
                System.out.print("Enter a number: ");
                int number = scanner.nextInt();

                if(number % 2 == 0){
                        System.out.println(number + " is even:");
                }else{
                        System.out.println(number + " is odd:");
                }
}
}
```

Output:

```
24mca30@mcaserver:~$ java EvenOdd
Enter a number: 5
5 is odd:
24mca30@mcaserver:~$
```

PGM2:
Sum of First n Natural Numbers

Aim:
Write a Java program to compute the sum of the first n natural numbers.

Source Code:

```
  GNU nano 6.2
import java.util.Scanner;
public class naturalnos
{
        public static void main(String arg[]){
                Scanner s=new Scanner(System.in);
                System.out.print("Enter n:");
                int n=s.nextInt();
                int sum=0;
                for(int i=1;i<=n;i++)
                        sum=sum+i;
                System.out.print("Sum="+sum);
                System.out.print("");
        }
}
```

Output:

```
24mca30@mcaserver:~/javalab$ java naturalnos
Enter n:5
Sum=1524mca30@mcaserver:~/javalab$
```

PGM3:
Factorial of a Number

Aim:
Write a Java program to compute the factorial of a given number.

Source Code:

```
  GNU nano 6.2
import java.util.Scanner;
public class factorial
{
        public static void main(String arg[]){
                Scanner s=new Scanner(System.in);
                System.out.print("Enter the number:");
                int n=s.nextInt();
                int fact=1;
                for(int i=1;i<=n;i++)
                        fact=fact*i;
                System.out.print("Factorial="+fact);
        }
}
```

Output:

```
24mca30@mcaserver:~/javalab$ java factorial
Enter the number:14
Factorial=1278945280024mca30@mcaserver:~/javalab$
```

PGM4:
Assigning Grades Based on Numeric Score

Aim:
Write a Java program that assigns a grade based on a numeric score.

Source Code:

```
Factorial=12024mca30@mcaserver:~/javalab$ cat grade.java
import java.util.Scanner;
public class grade{
        public static void main(String arg[]){
                Scanner s=new Scanner(System.in);
                System.out.print("Enter the mark:");
                int m=s.nextInt();
                if(m>=90){
                        System.out.print("Grade A");
                }
                else if(m>=80){
                        System.out.print("Grade B");
                }
                else if(m>=70){
                        System.out.print("Grade C");
                }
                else if(m>=60){
                        System.out.print("Grade D");
                }
                else{
                        System.out.print("Grade F");
                }
        }
}
```

Output:

```
24mca30@mcaserver:~/javalab$ javac grade.java
24mca30@mcaserver:~/javalab$ java grade
Enter the mark:67
Grade D24mca30@mcaserver:~/javalab$
```