ASSIGNMENT – 1

Program 1 :

Source Code :

```java
import java.util.Scanner;
public class OddEven{
        public static void main(String args[]){
                Scanner sc =new Scanner(System.in);
                System.out.print("Enter a number : ");
                int num = sc.nextInt();
                if(num %2 ==0)
                        System.out.println(num+" is even");
                else
                        System.out.println(num+" is odd");
        }
}
```

Output :

```
24mca27@mcaserver:~/oops$ java OddEven
Enter a number : 53
53 is odd
```

Program 2 :

Source Code :

```java
import java.util.Scanner;
public class SumOfFirstNNaturalNumbers {
    public static void main(String args[]){
        System.out.print("Enter a value for N : ");
        Scanner sc = new Scanner(System.in);
        int n=sc.nextInt();
        int sum=0;
        for(int i=1;i<=n;i++)
            sum+=i;
        System.out.println( " The sum of the first " + n + " numbers is : " + sum ) ;
    }
}
```

Output :

```
24mca27@mcaserver:~/oops$ java SumOfFirstNNaturalNumbers
Enter a value for N : 6
 The sum of the first 6 numbers is : 21
```

Program 3 :

Source Code :

```java
import java.util.Scanner;
public class Fact{
        public static void main(String args[]){
                Scanner sc=new Scanner(System.in);
                System.out.print("Enter a number : ");
                int num=sc.nextInt();
                int fact=1;
                for(int i=1;i<=num;i++)
                        fact*=i;
                if(num==0)
                        System.out.println(" the factorial is 1");
                else
                        System.out.println(" the factorial is "+fact);
        }
}
```

Output :

```
24mca27@mcaserver:~/oops$ java Fact
Enter a number : 5
 the factorial is 120
```

Program 4 :

Source Code :

```java
import java.util.Scanner;
public class Grade{
public static void main ( String [] args ) {
        Scanner scanner = new Scanner ( System . in ) ;
        System . out . print ( " Enter the score : " ) ;
        int score = scanner . nextInt () ;
        String grade;
        switch ( score / 10) {
                case 10:
                case 9: grade= "A "; break ;
                case 8: grade= "B "; break ;
                case 7: grade= "C "; break ;
                case 6: grade= "D "; break ;
                default : grade= "F "; break ;
        }
        System.out.println ( " Your grade is : " + grade ) ;
        }
}
```

Output :

```
24mca27@mcaserver:~/oops$ java Grade
 Enter the score : 79
 Your grade is : C
```