

Practical No. 3(B)

Program :

```
import java.util.Scanner;

@FunctionalInterface
interface Factorial {
    long calculate(int n);
}

public class Prac3B {
    public static void main(String[] args) {
        Factorial factorial = new Factorial() {
            @Override
            public long calculate(int n) {
                if (n == 0) {
                    return 1;
                } else {
                    return n * calculate(n - 1);
                }
            }
        };

        int number;
        System.out.print("Enter a number: ");
        Scanner sc = new Scanner(System.in);
        number = sc.nextInt();
        long result = factorial.calculate(number);
        System.out.println("Factorial of " + number + " is: " + result);
    }
}
```

Output :

```
Enter a number: 6
Factorial of 6 is: 720
```