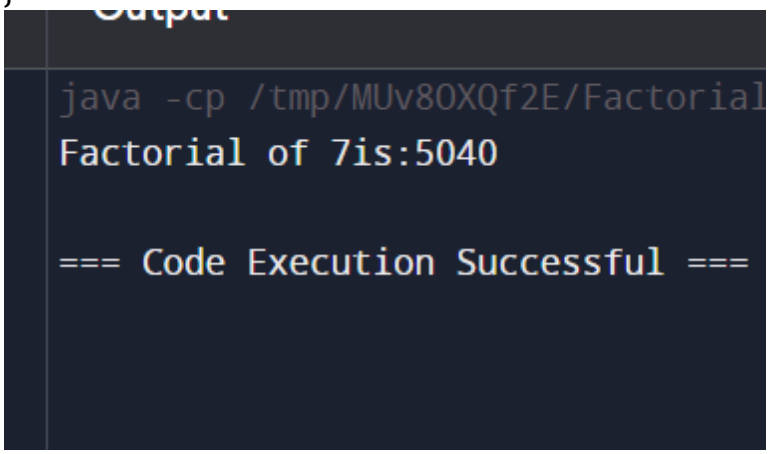
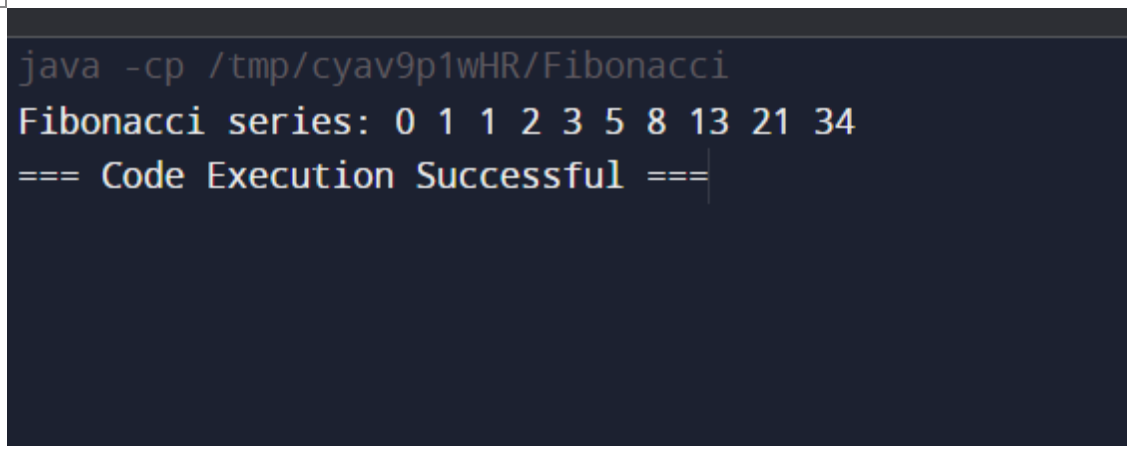
1.write a java program of factorial number using recursion method

```
public class Factorial {
   public static int factorial(int n) {
      if (n<=1) {
         return 1;
      } else {
         return n*factorial(n-1);
      }
   }
   public static void main(String[] args) {
      int number=7;
      int result=factorial(number);
      System.out.println("Factorial of "+number+"is:"+result);
   }
}
```



2.fibonacci using recursion

```
public class Fibonacci {
   public static int fibonacci(int n) {
      if (n<=1) {
         return n;
      } else {
         return fibonacci(n-1)+fibonacci(n-2);
      }
   }
   public static void main(String[] args) {
      int count=10;
      System.out.print("Fibonacci series: ");
      for (int i=0;i<count;i++) {
         System.out.print(fibonacci(i)+" ");
      }
   }
}
```



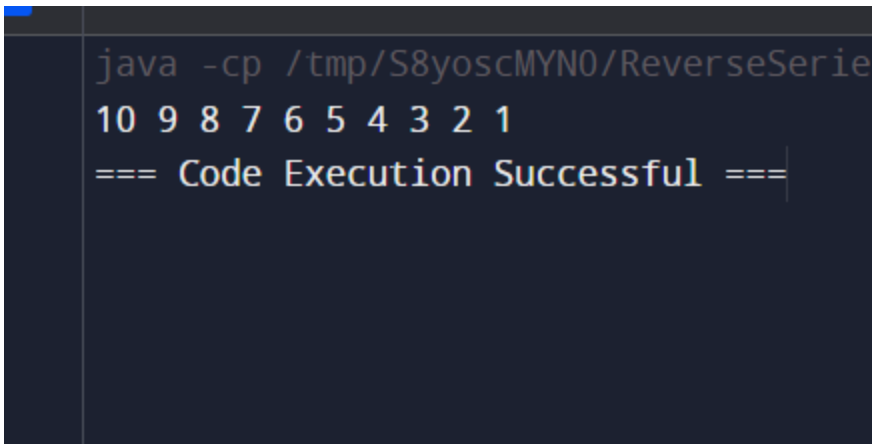
3.palindrome using recursion

```
public class Palindrome {
    public static boolean isPalindrome(String str, int start, int end) {
        if (start >= end) {
            return true;
        }
        if (str.charAt(start) != str.charAt(end)) {
            return false;
        }
        return isPalindrome(str, start + 1, end - 1);
    }
    public static void main(String[] args) {
        String word = "racecar";
        boolean result = isPalindrome(word, 0, word.length() - 1);
        if (result) {
            System.out.println(word + " is a palindrome.");
        } else {
            System.out.println(word + " is not a palindrome.");
        }
    }
}
```

4.print the given number in reverse order

```
public class ReverseSeries {
    public static void printReverse(int n) {
        if (n<1) {
            return;
        }
        System.out.print(n+" ");
        printReverse(n-1);
    }
    public static void main(String[] args) {
        int number=10;
```

```
        printReverse(number);
    }
}
```



5.add the given series using recursion

```
public class SeriesSum {
    public static int addSeries(int n) {
        if (n <= 0) {
            return 0;
        }
        return n + addSeries(n - 1);
    }
    public static void main(String[] args) {
        int number = 5;
        int sum = addSeries(number);
        System.out.println("Sum of series from 1 to " + number + " is: " + sum);
    }
}
```