Lab Assessment
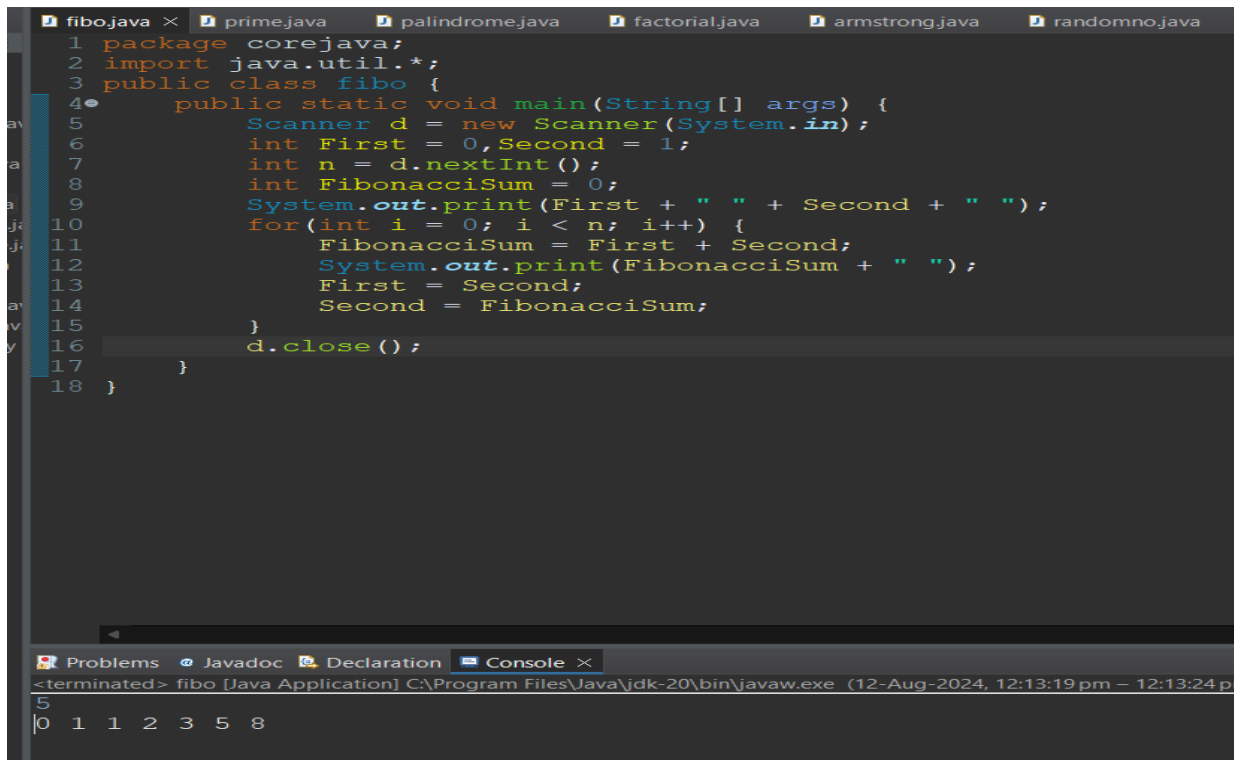
1. Fibonacci Series in Java
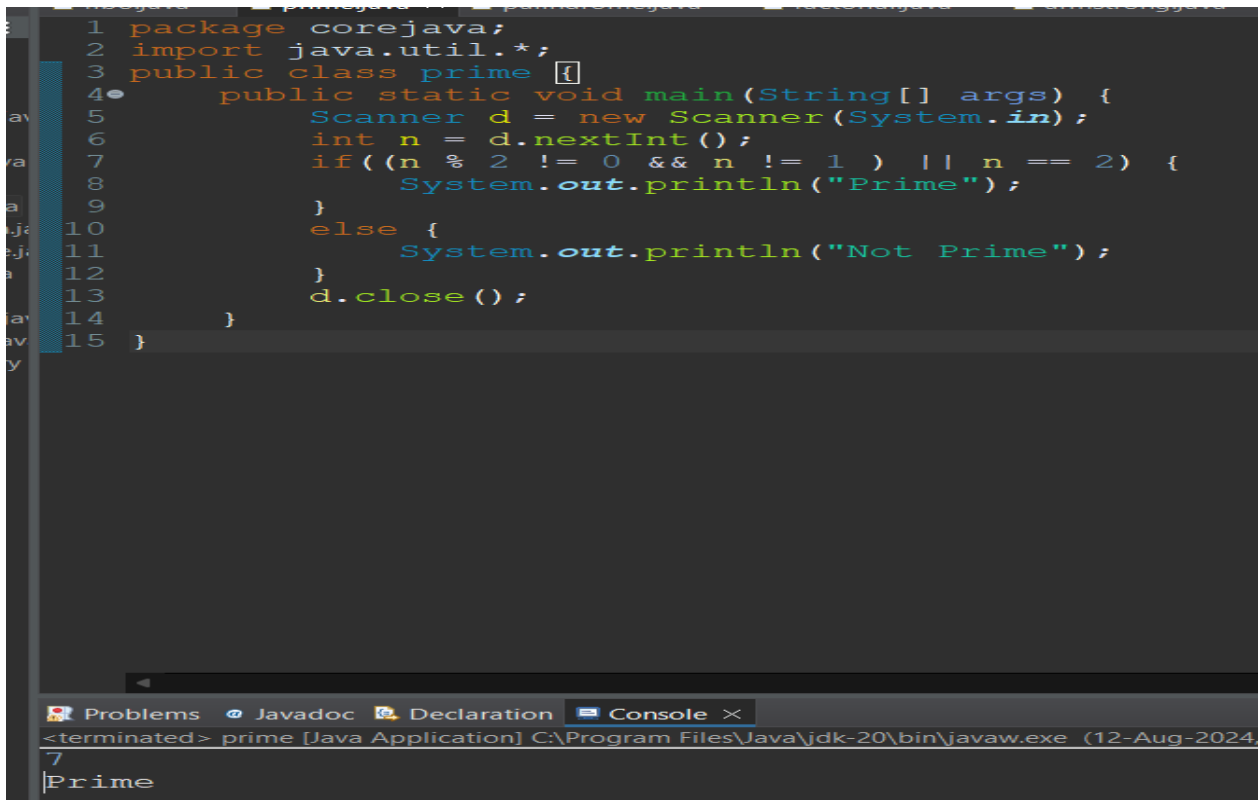
```java
package corejava;
import java.util.*;
public class fibo {
    public static void main(String[] args) {
        Scanner d = new Scanner(System.in);
        int First = 0,Second = 1;
        int n = d.nextInt();
        int FibonacciSum = 0;
        System.out.print(First + " " + Second + " ");
        for(int i = 0; i < n; i++) {
            FibonacciSum = First + Second;
            System.out.print(FibonacciSum + " ");
            First = Second;
            Second = FibonacciSum;
        }
        d.close();
    }
}
```

Problems Javadoc Declaration Console ×
<terminated> fibo [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-Aug-2024, 12:13:19 pm – 12:13:24 p
```
5
0 1 1 2 3 5 8
```
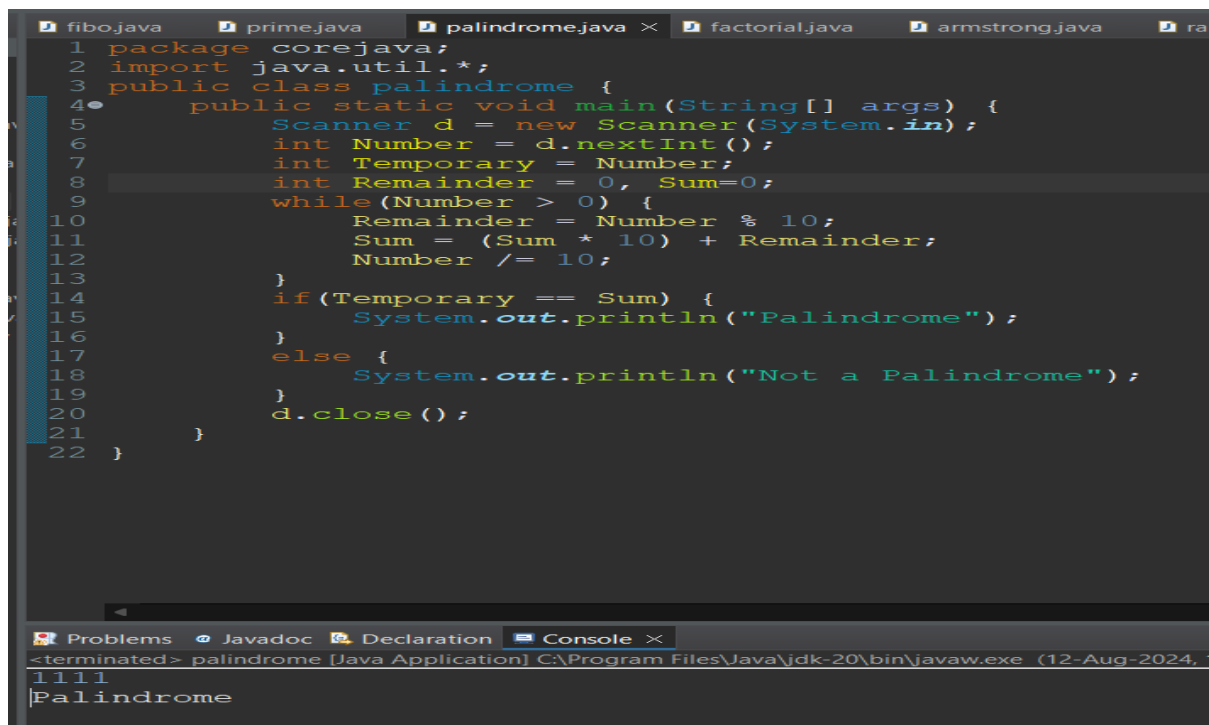
2. Prime Number Program in Java

```java
package corejava;
import java.util.*;
public class prime {
    public static void main(String[] args) {
        Scanner d = new Scanner(System.in);
        int n = d.nextInt();
        if((n % 2 != 0 && n != 1 ) || n == 2) {
            System.out.println("Prime");
        }
        else {
            System.out.println("Not Prime");
        }
        d.close();
    }
}
```

Problems Javadoc Declaration Console ×
<terminated> prime [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-Aug-2024,
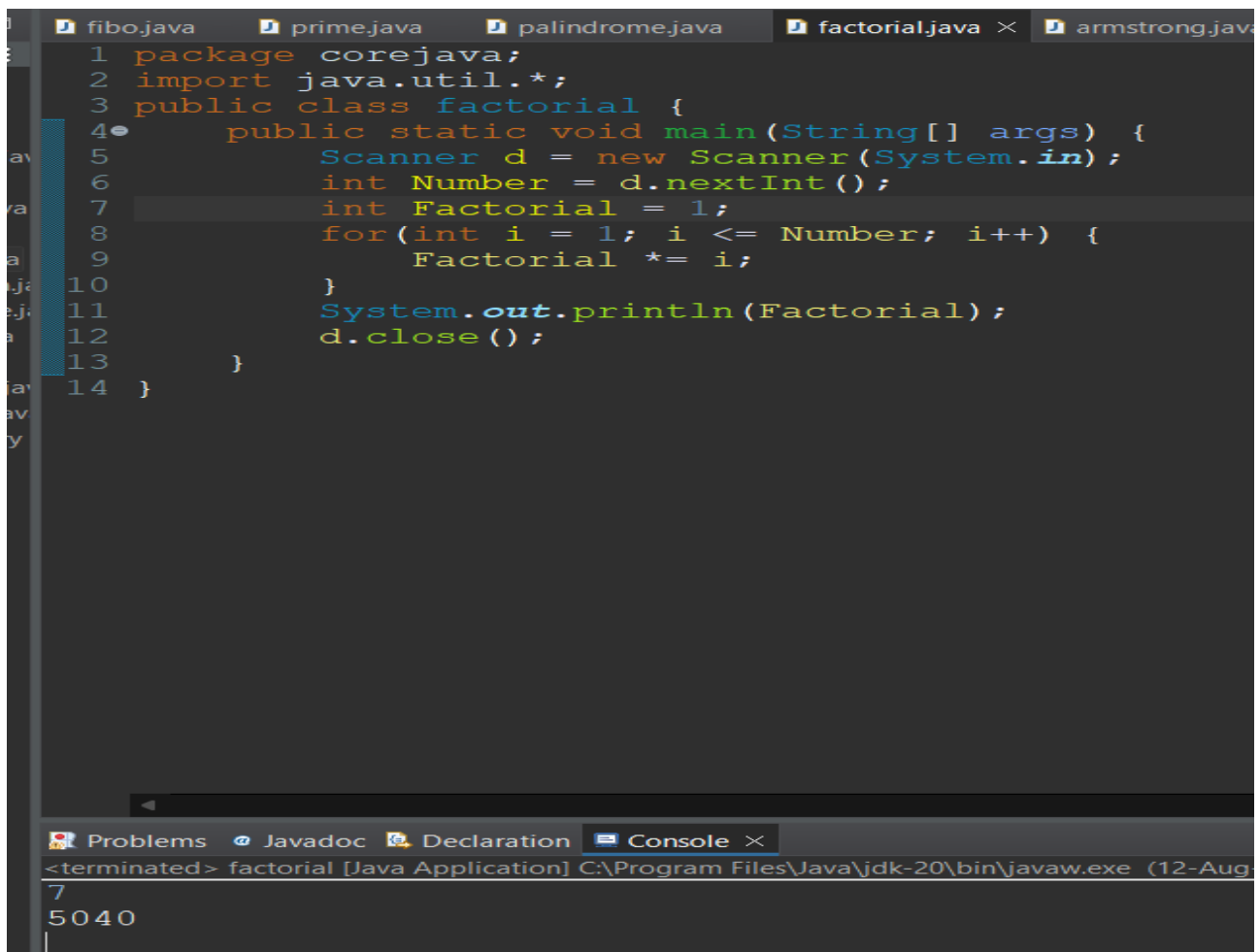```
7
Prime
```

3. Palindrome Program in Java

```java
package corejava;
import java.util.*;
public class palindrome {
    public static void main(String[] args) {
        Scanner d = new Scanner(System.in);
        int Number = d.nextInt();
        int Temporary = Number;
        int Remainder = 0, Sum=0;
        while(Number > 0) {
            Remainder = Number % 10;
            Sum = (Sum * 10) + Remainder;
            Number /= 10;
        }
        if(Temporary == Sum) {
            System.out.println("Palindrome");
        }
        else {
            System.out.println("Not a Palindrome");
        }
        d.close();
    }
}
```

Problems Javadoc Declaration Console ×
<terminated> palindrome [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-Aug-2024,
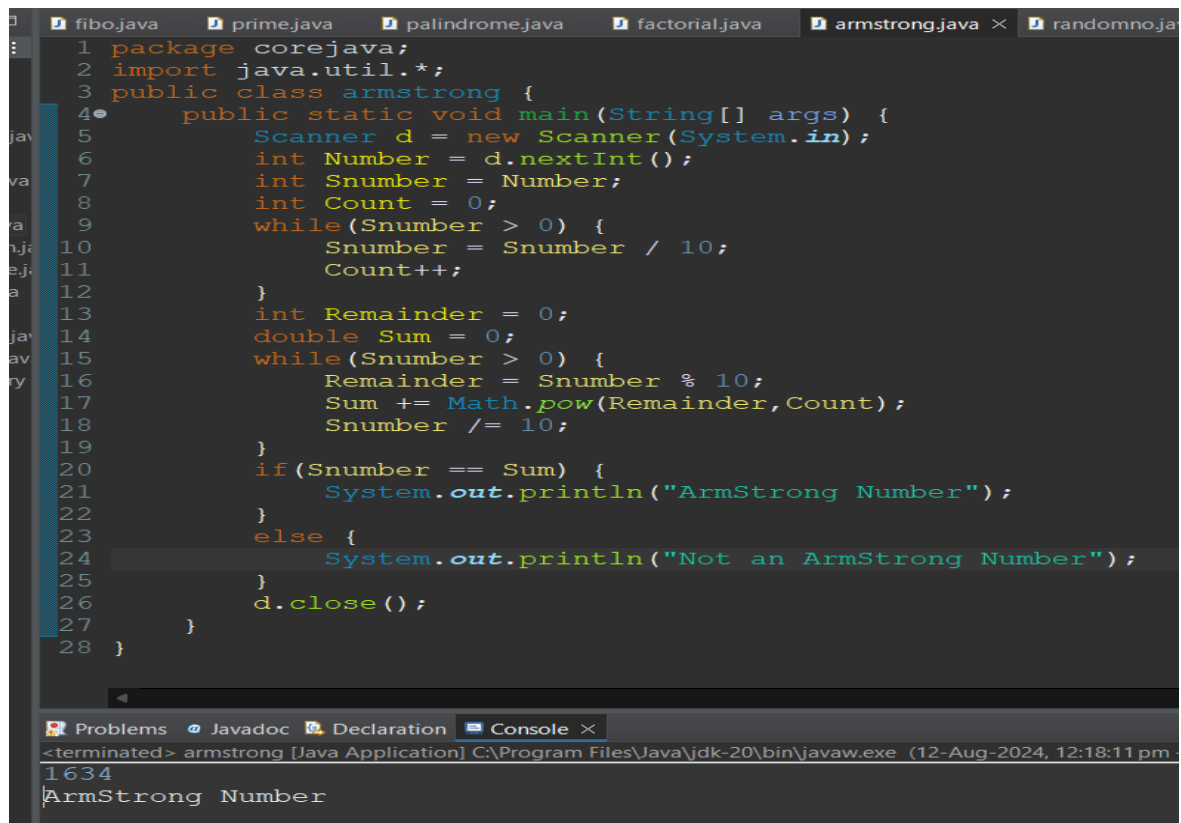1111
Palindrome

4. Factorial Program in Java

```java
package corejava;
import java.util.*;
public class factorial {
    public static void main(String[] args) {
        Scanner d = new Scanner(System.in);
        int Number = d.nextInt();
        int Factorial = 1;
        for(int i = 1; i <= Number; i++) {
            Factorial *= i;
        }
        System.out.println(Factorial);
        d.close();
    }
}
```

Problems Javadoc Declaration Console ×
<terminated> factorial [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-Aug-
7
5040

5. Armstrong Number in Java

```java
package corejava;
import java.util.*;
public class armstrong {
    public static void main(String[] args) {
        Scanner d = new Scanner(System.in);
        int Number = d.nextInt();
        int Snumber = Number;
        int Count = 0;
        while(Snumber > 0) {
            Snumber = Snumber / 10;
            Count++;
        }
        int Remainder = 0;
        double Sum = 0;
        while(Snumber > 0) {
            Remainder = Snumber % 10;
            Sum += Math.pow(Remainder,Count);
            Snumber /= 10;
        }
        if(Snumber == Sum) {
            System.out.println("ArmStrong Number");
        }
        else {
            System.out.println("Not an ArmStrong Number");
        }
        d.close();
    }
}
```
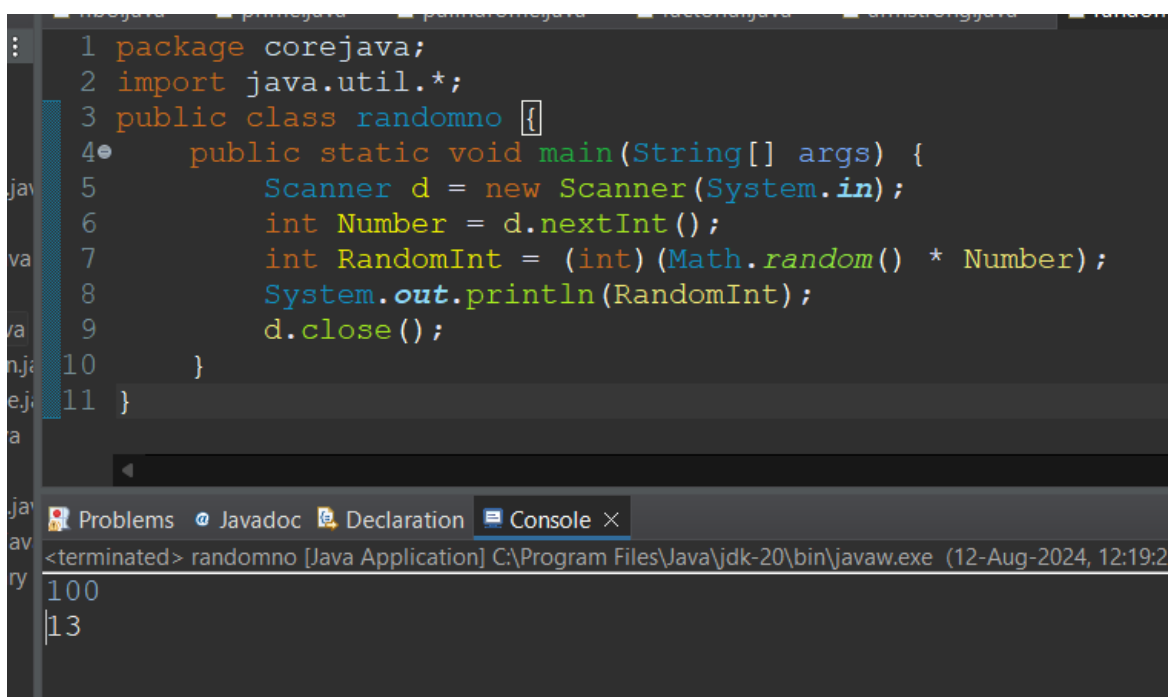
Problems Javadoc Declaration Console ×

<terminated> armstrong [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-Aug-2024, 12:18:11 pm

```
1634
ArmStrong Number
```

6. How to Generate Random Number in Java

```java
package corejava;
import java.util.*;
public class randomno {
    public static void main(String[] args) {
        Scanner d = new Scanner(System.in);
        int Number = d.nextInt();
        int RandomInt = (int)(Math.random() * Number);
        System.out.println(RandomInt);
        d.close();
    }
}
```
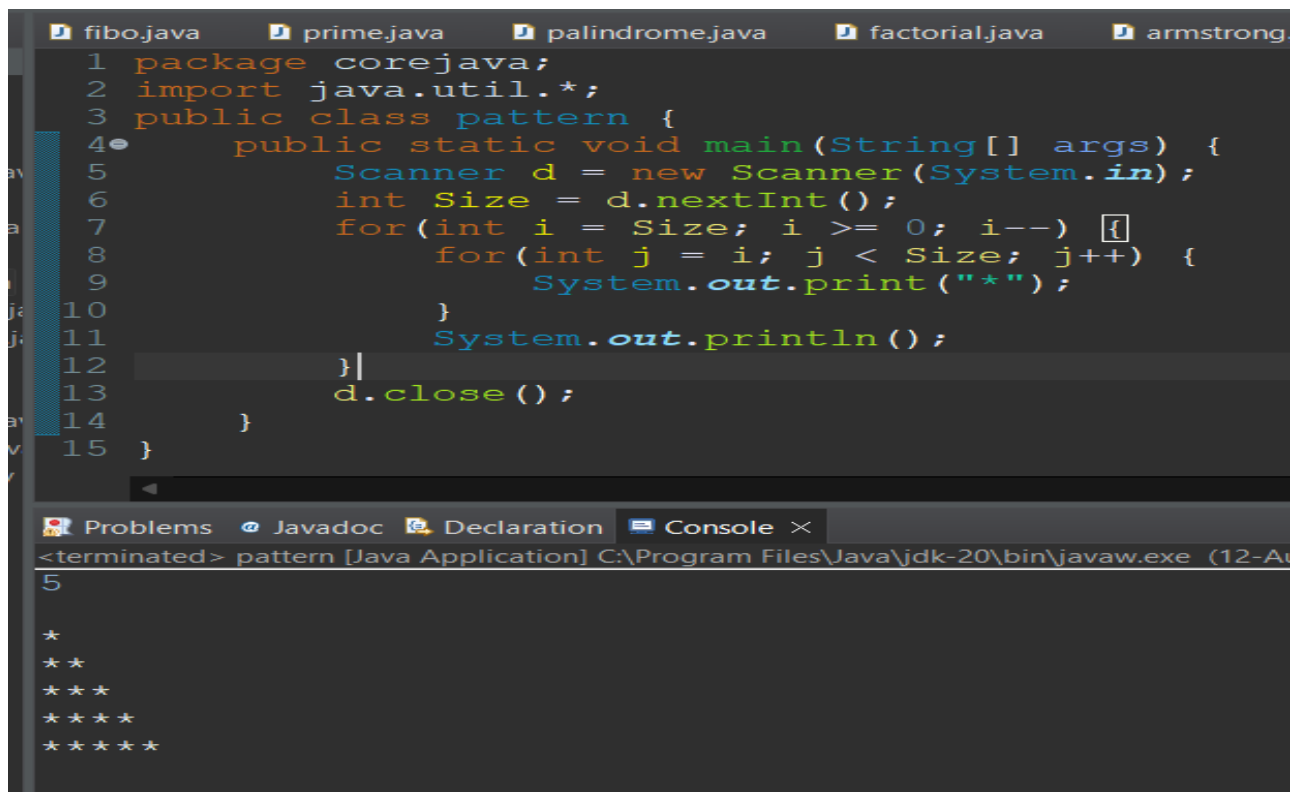
Problems Javadoc Declaration Console ×

<terminated> randomno [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-Aug-2024, 12:19:2

```
100
13
```

7. How to Print Pattern in Java

```java
package corejava;
import java.util.*;
public class pattern {
    public static void main(String[] args) {
        Scanner d = new Scanner(System.in);
        int Size = d.nextInt();
        for(int i = Size; i >= 0; i--) {
            for(int j = i; j < Size; j++) {
                System.out.print("*");
            }
            System.out.println();
        }
        d.close();
    }
}
```
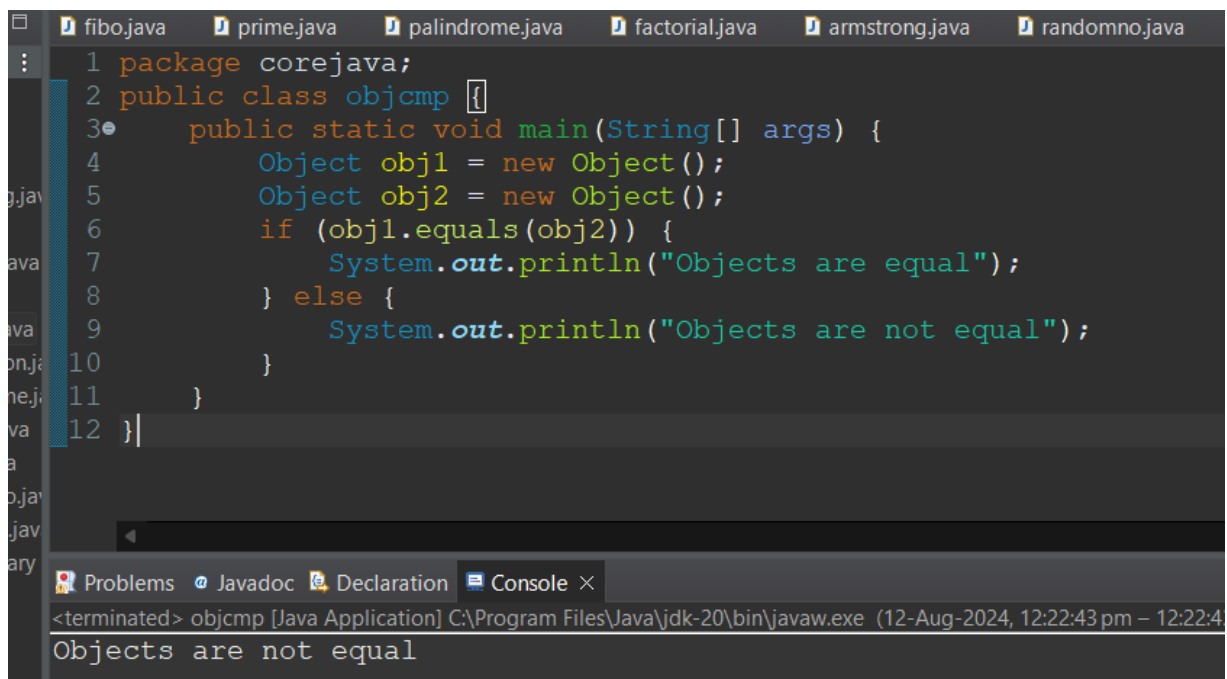
```
<terminated> pattern [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-A
5

*
* *
* * *
* * * *
* * * * *
```

8. How to Compare Two Objects in Java
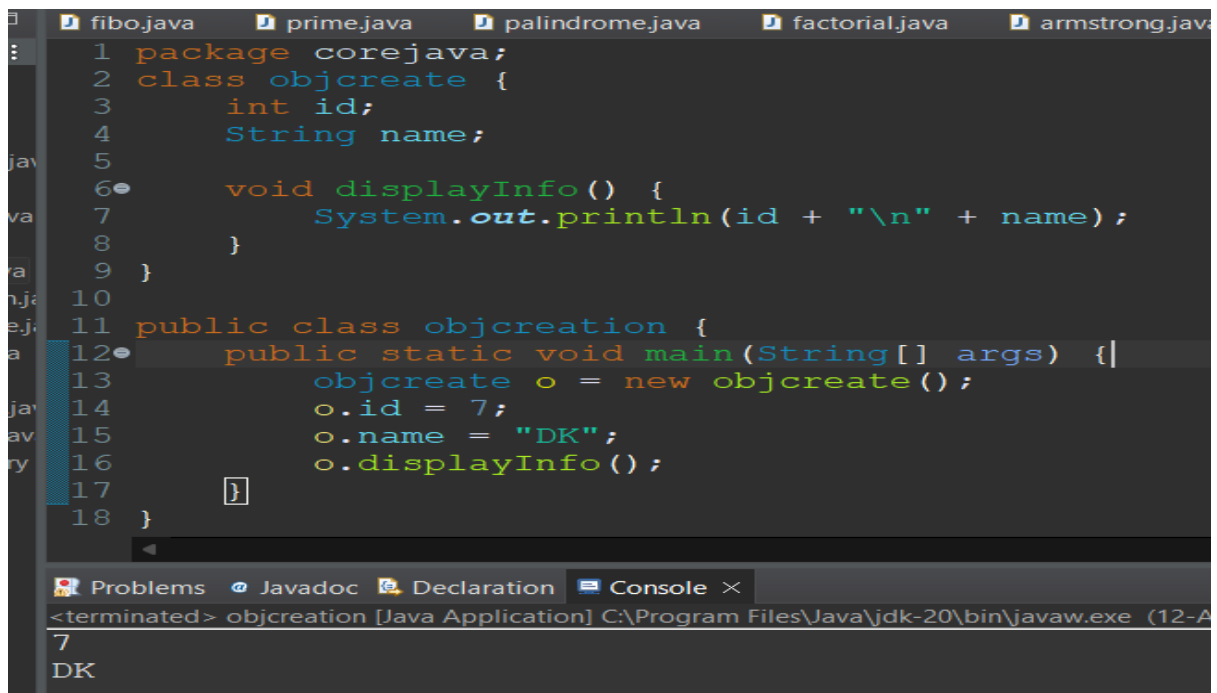
```java
package corejava;
public class objcmp {
    public static void main(String[] args) {
        Object obj1 = new Object();
        Object obj2 = new Object();
        if (obj1.equals(obj2)) {
            System.out.println("Objects are equal");
        } else {
            System.out.println("Objects are not equal");
        }
    }
}
```

```
<terminated> objcmp [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-Aug-2024, 12:22:43 pm – 12:22:4
Objects are not equal
```

9. How to Create Object in Java

```java
package corejava;
class objcreate {
    int id;
    String name;

    void displayInfo() {
        System.out.println(id + "\n" + name);
    }
}

public class objcreation {
    public static void main(String[] args) {
        objcreate o = new objcreate();
        o.id = 7;
        o.name = "DK";
        o.displayInfo();
    }
}
```
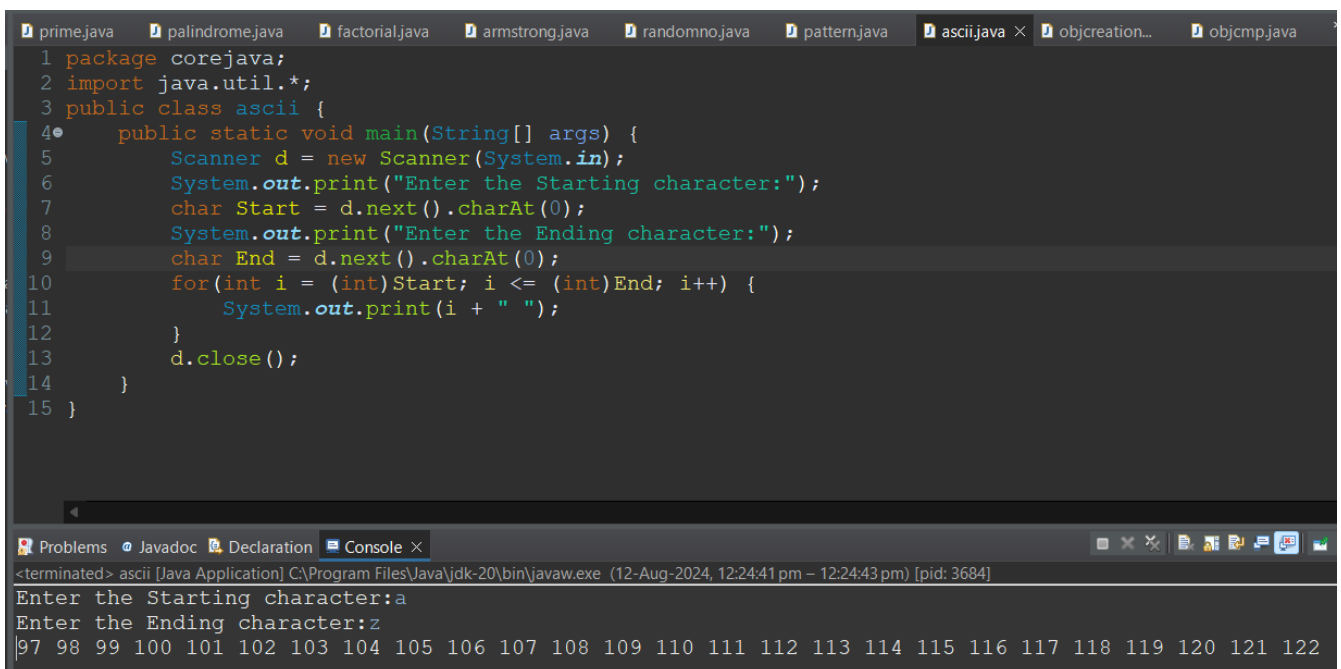
Problems @ Javadoc Declaration ■ Console ×
<terminated> objcreation [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-A

```
7
DK
```

10. How to Print ASCII Value in Java

```java
package corejava;
import java.util.*;
public class ascii {
    public static void main(String[] args) {
        Scanner d = new Scanner(System.in);
        System.out.print("Enter the Starting character:");
        char Start = d.next().charAt(0);
        System.out.print("Enter the Ending character:");
        char End = d.next().charAt(0);
        for(int i = (int)Start; i <= (int)End; i++) {
            System.out.print(i + " ");
        }
        d.close();
    }
}
```

Problems @ Javadoc Declaration ■ Console ×
<terminated> ascii [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (12-Aug-2024, 12:24:41 pm – 12:24:43 pm) [pid: 3684]

```
Enter the Starting character:a
Enter the Ending character:z
97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122
```