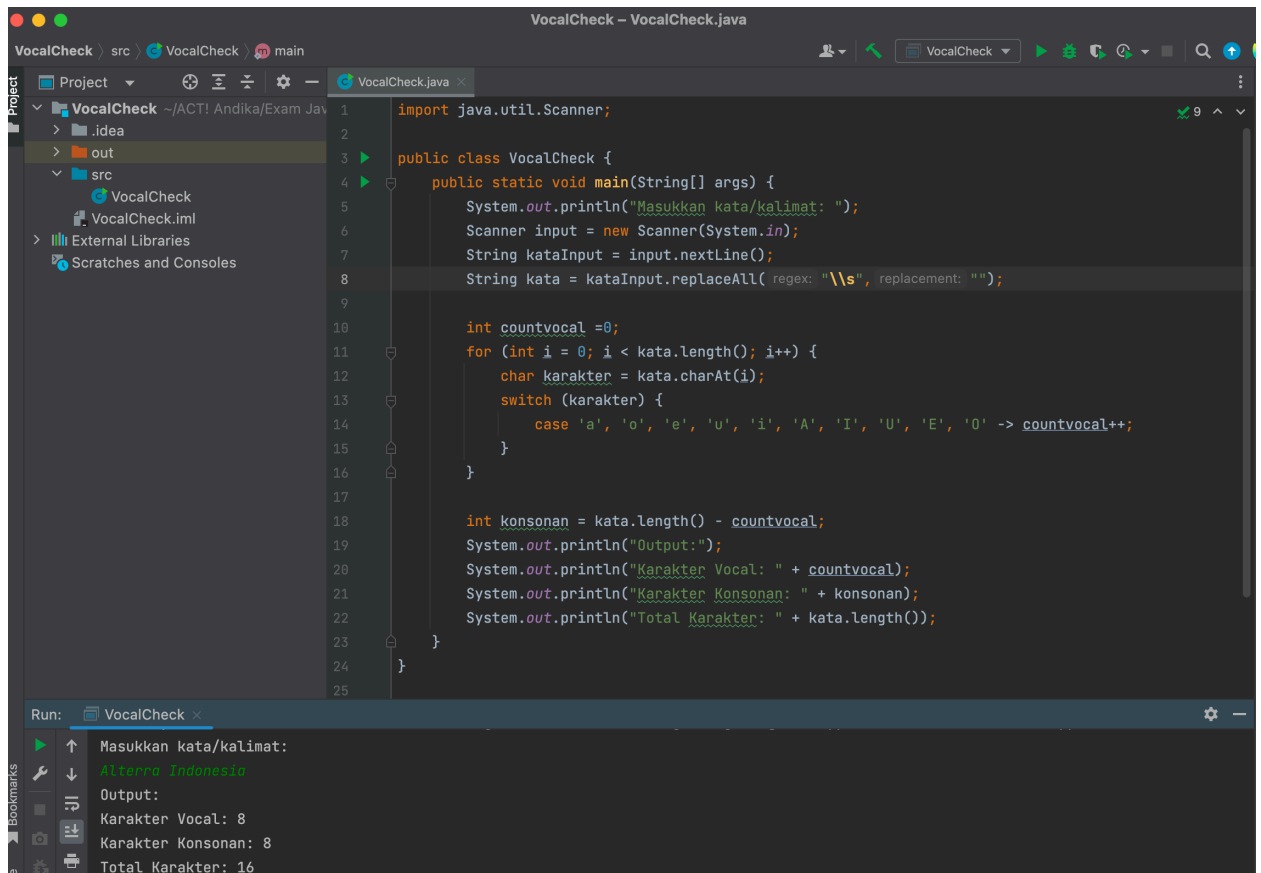


Task Spring Java: Basic Java

1. Vokal dan konsonan



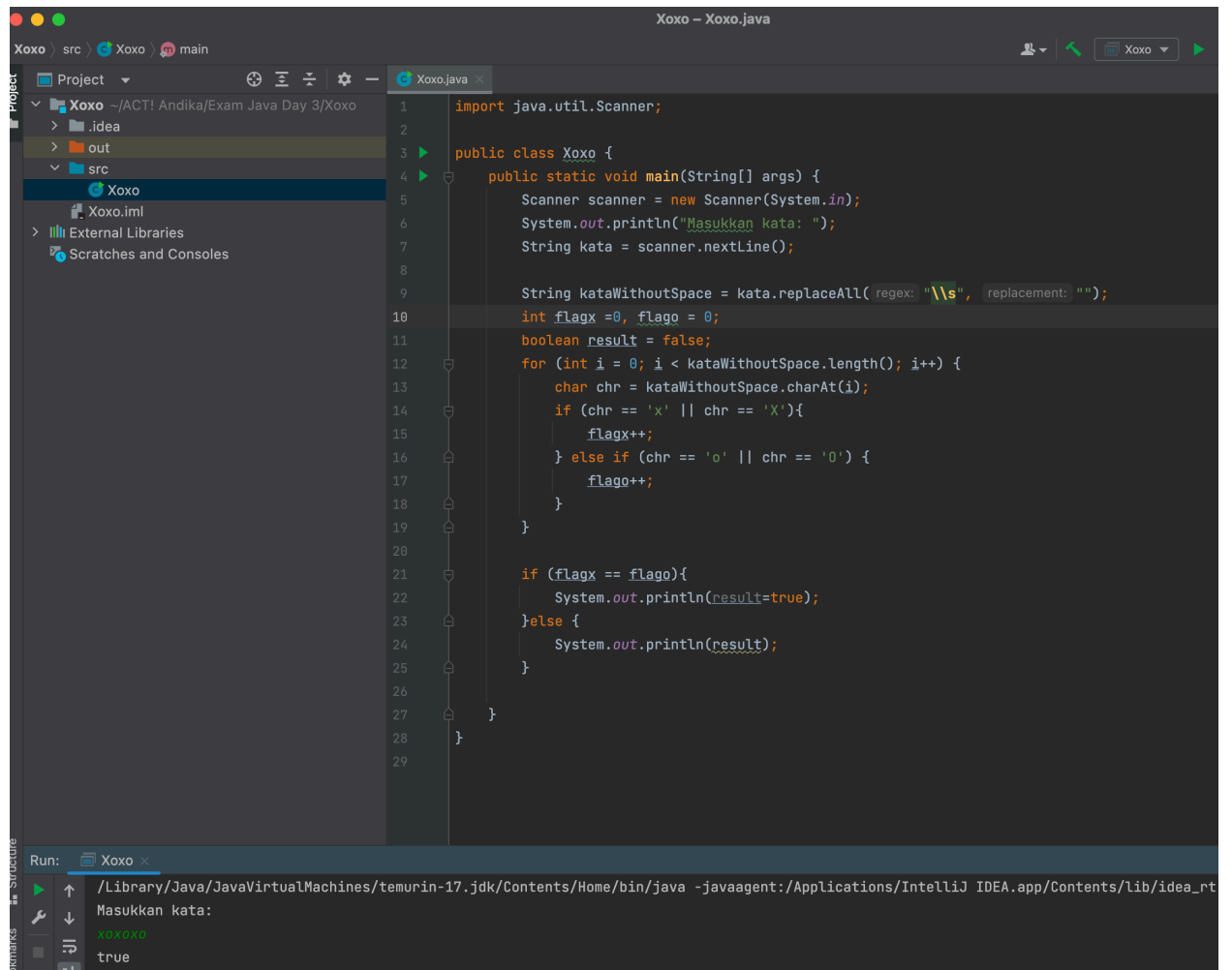
The screenshot shows an IDE window titled "VocalCheck - VocalCheck.java". The code is as follows:

```
1 import java.util.Scanner;
2
3 public class VocalCheck {
4     public static void main(String[] args) {
5         System.out.println("Masukkan kata/kalimat: ");
6         Scanner input = new Scanner(System.in);
7         String kataInput = input.nextLine();
8         String kata = kataInput.replaceAll("s", "");
9
10        int countvocal = 0;
11        for (int i = 0; i < kata.length(); i++) {
12            char karakter = kata.charAt(i);
13            switch (karakter) {
14                case 'a', 'o', 'e', 'u', 'i', 'A', 'I', 'U', 'E', 'O' -> countvocal++;
15            }
16        }
17
18        int konsonan = kata.length() - countvocal;
19        System.out.println("Output:");
20        System.out.println("Karakter Vokal: " + countvocal);
21        System.out.println("Karakter Konsonan: " + konsonan);
22        System.out.println("Total Karakter: " + kata.length());
23    }
24 }
25 }
```

The Run console at the bottom shows the following output:

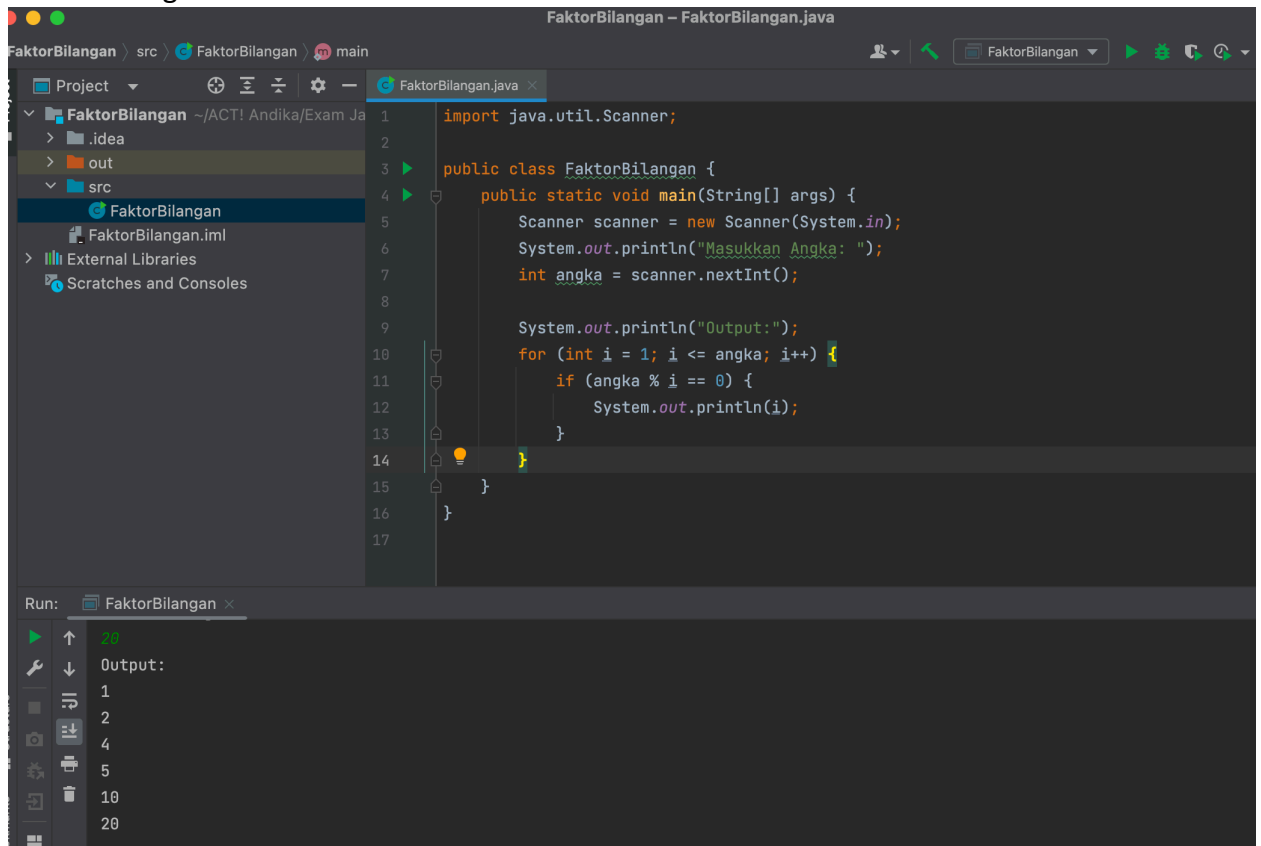
```
Run: VocalCheck x
Masukkan kata/kalimat:
Alterra Indonesia
Output:
Karakter Vokal: 8
Karakter Konsonan: 8
Total Karakter: 16
```

2. X dan O



```
Xoxo - Xoxo.java
Xoxo \ src \ Xoxo \ main
Project
  Xoxo ~\ACT! Andika\Exam Java Day 3\Xoxo
    .idea
    out
    src
      Xoxo
      Xoxo.iml
    External Libraries
    Scratches and Consoles
Xoxo.java
1  import java.util.Scanner;
2
3  public class Xoxo {
4      public static void main(String[] args) {
5          Scanner scanner = new Scanner(System.in);
6          System.out.println("Masukkan kata: ");
7          String kata = scanner.nextLine();
8
9          String kataWithoutSpace = kata.replaceAll(" ", "");
10         int flagx = 0, flago = 0;
11         boolean result = false;
12         for (int i = 0; i < kataWithoutSpace.length(); i++) {
13             char chr = kataWithoutSpace.charAt(i);
14             if (chr == 'x' || chr == 'X'){
15                 flagx++;
16             } else if (chr == 'o' || chr == 'O') {
17                 flago++;
18             }
19         }
20
21         if (flagx == flago){
22             System.out.println(result=true);
23         } else {
24             System.out.println(result);
25         }
26     }
27 }
28
29
Run: Xoxo x
/Library/Java/JavaVirtualMachines/temurin-17.jdk/Contents/Home/bin/java -javaagent:/Applications/IntelliJ IDEA.app/Contents/lib/idea_rt
Masukkan kata:
xoxoxo
true
```

3. Faktor Bilangan



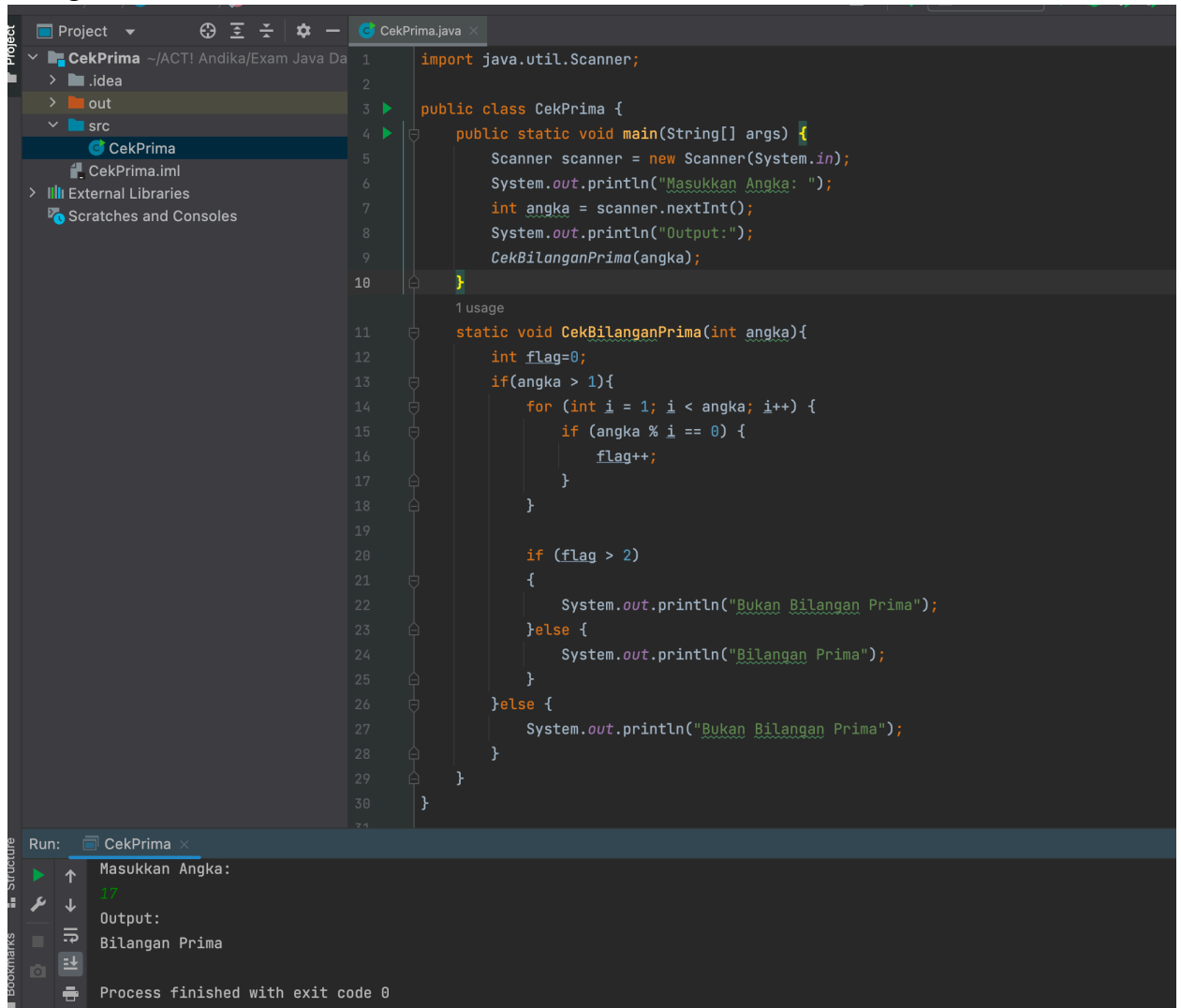
The screenshot shows an IDE window titled "FaktorBilangan - FaktorBilangan.java". The left sidebar displays a project structure with folders ".idea", "out", and "src", and a file "FaktorBilangan.java". The main editor area contains the following Java code:

```
1 import java.util.Scanner;
2
3 public class FaktorBilangan {
4     public static void main(String[] args) {
5         Scanner scanner = new Scanner(System.in);
6         System.out.println("Masukkan Angka: ");
7         int angka = scanner.nextInt();
8
9         System.out.println("Output:");
10        for (int i = 1; i <= angka; i++) {
11            if (angka % i == 0) {
12                System.out.println(i);
13            }
14        }
15    }
16 }
17
```

Below the code editor, the "Run" tab is active, showing the output of the program. The input "20" is entered, and the output is:

```
Output:
1
2
4
5
10
20
```

4. Bilangan Prima



```
1 import java.util.Scanner;
2
3 public class CekPrima {
4     public static void main(String[] args) {
5         Scanner scanner = new Scanner(System.in);
6         System.out.println("Masukkan Angka: ");
7         int angka = scanner.nextInt();
8         System.out.println("Output:");
9         CekBilanganPrima(angka);
10    }
11
12    1 usage
13    static void CekBilanganPrima(int angka){
14        int flag=0;
15        if(angka > 1){
16            for (int i = 1; i < angka; i++) {
17                if (angka % i == 0) {
18                    flag++;
19                }
20            }
21
22            if (flag > 2)
23            {
24                System.out.println("Bukan Bilangan Prima");
25            }else {
26                System.out.println("Bilangan Prima");
27            }
28        }else {
29            System.out.println("Bukan Bilangan Prima");
30        }
31    }
32 }
```

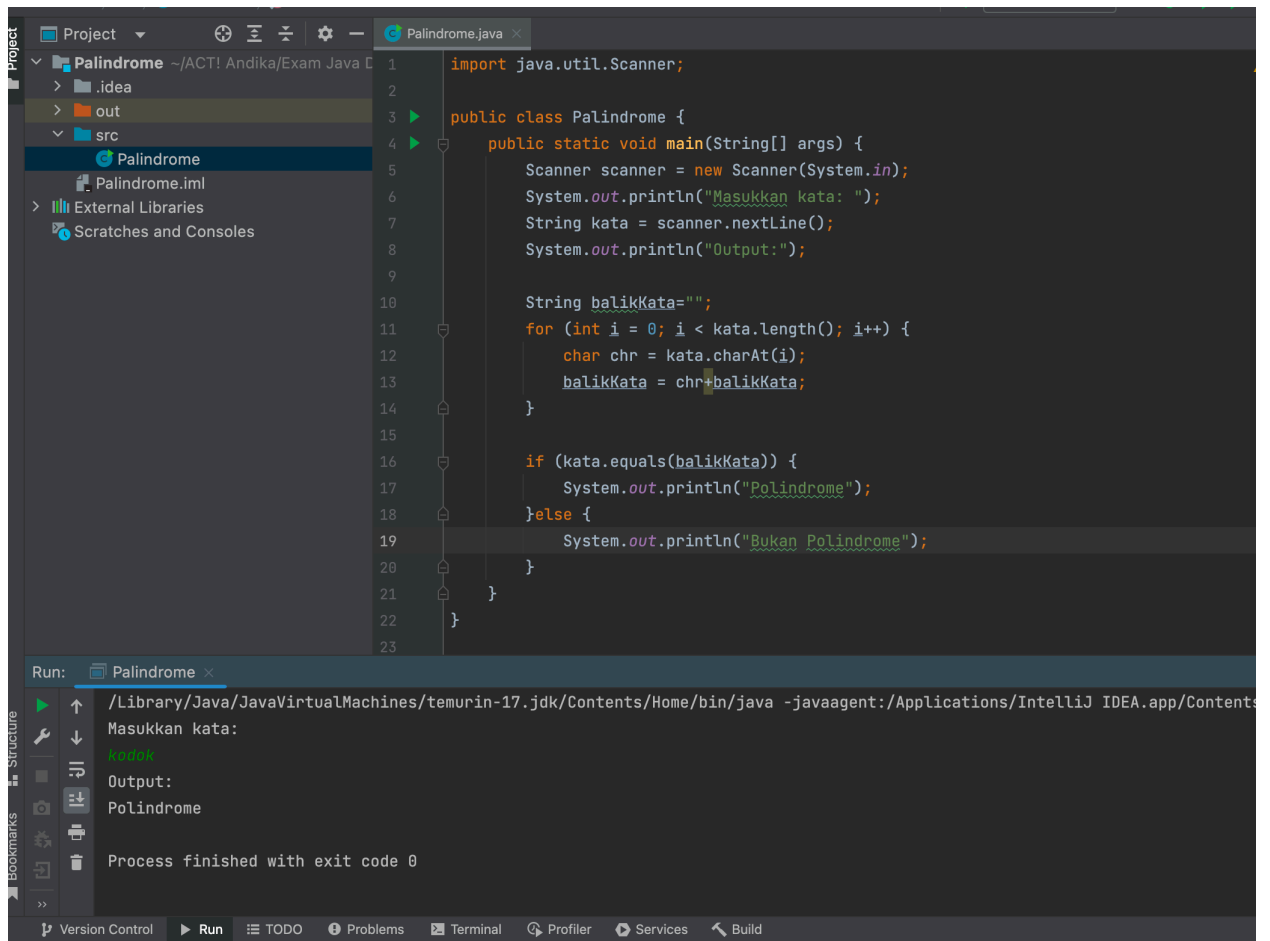
Run: CekPrima x

Masukkan Angka:
17

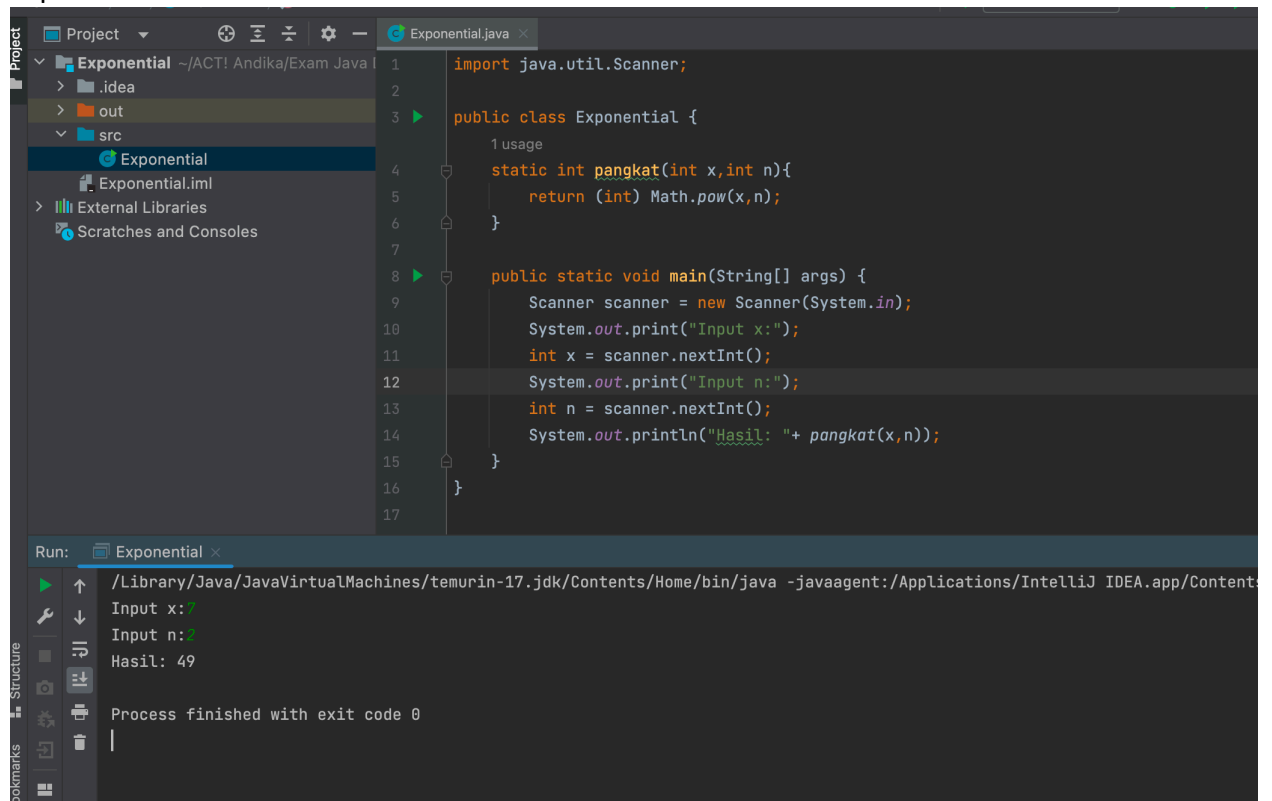
Output:
Bilangan Prima

Process finished with exit code 0

5. Palindrome



6. Exponentiation



The screenshot displays the IntelliJ IDEA IDE with a project named "Exponential". The project structure on the left includes a "src" directory containing "Exponential.java" and "Exponential.iml". The main editor shows the code for "Exponential.java", which defines a static method "pangkat" and a "main" method. The "Run" console at the bottom shows the execution of the program, with input values 7 and 2, resulting in the output "Hasil: 49".

```
1  import java.util.Scanner;
2
3  public class Exponential {
4      static int pangkat(int x,int n){
5          return (int) Math.pow(x,n);
6      }
7
8      public static void main(String[] args) {
9          Scanner scanner = new Scanner(System.in);
10         System.out.print("Input x:");
11         int x = scanner.nextInt();
12         System.out.print("Input n:");
13         int n = scanner.nextInt();
14         System.out.println("Hasil: "+ pangkat(x,n));
15     }
16 }
17
```

Run: Exponential x

/Library/Java/JavaVirtualMachines/temurin-17.jdk/Contents/Home/bin/java -javaagent:/Applications/IntelliJ IDEA.app/Content

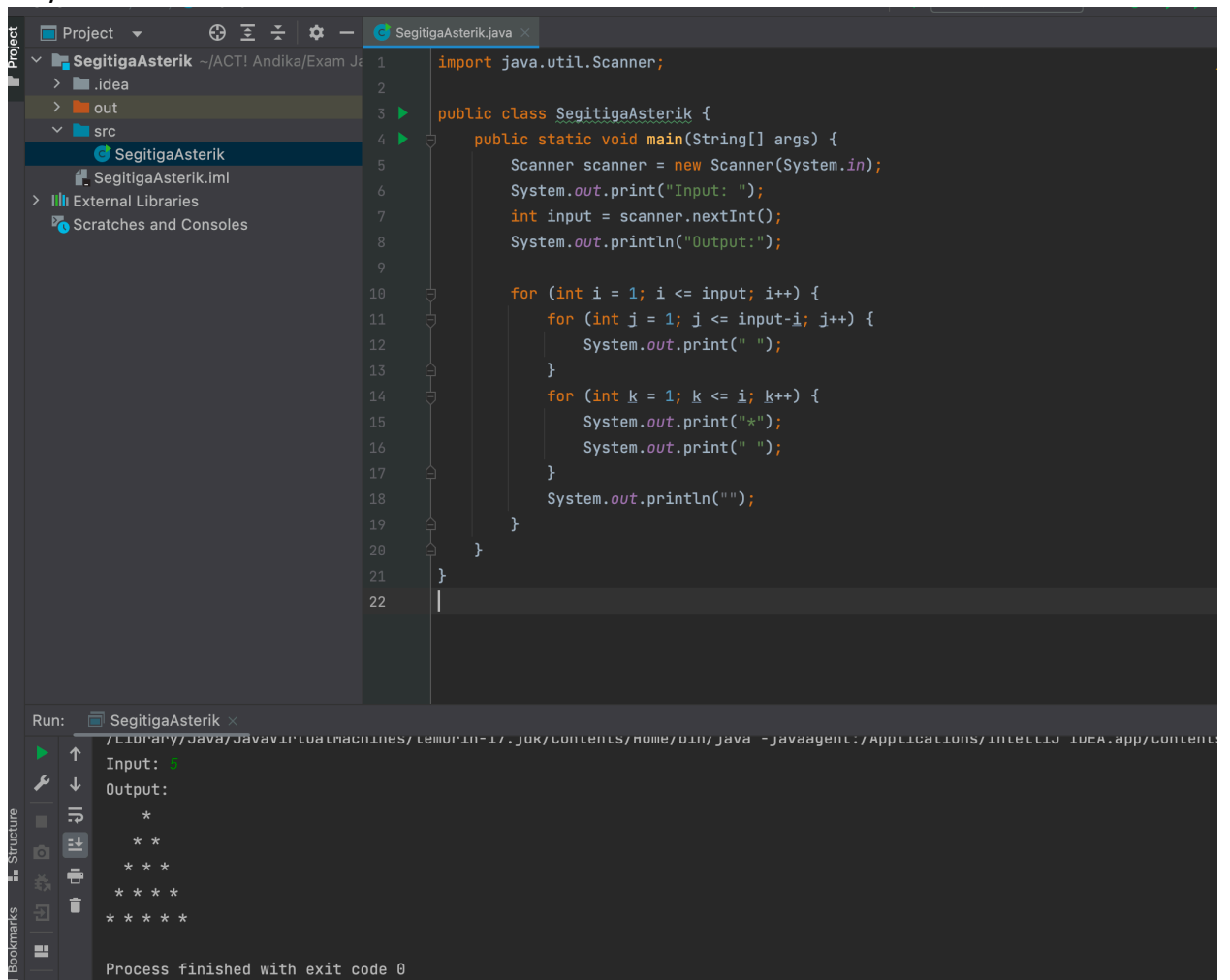
Input x: 7

Input n: 2

Hasil: 49

Process finished with exit code 0

7. Play With Asterik



```
1  import java.util.Scanner;
2
3  public class SegitigaAsterik {
4      public static void main(String[] args) {
5          Scanner scanner = new Scanner(System.in);
6          System.out.print("Input: ");
7          int input = scanner.nextInt();
8          System.out.println("Output:");
9
10         for (int i = 1; i <= input; i++) {
11             for (int j = 1; j <= input-i; j++) {
12                 System.out.print(" ");
13             }
14             for (int k = 1; k <= i; k++) {
15                 System.out.print("*");
16                 System.out.print(" ");
17             }
18             System.out.println("");
19         }
20     }
21 }
22
```

Run: SegitigaAsterik x

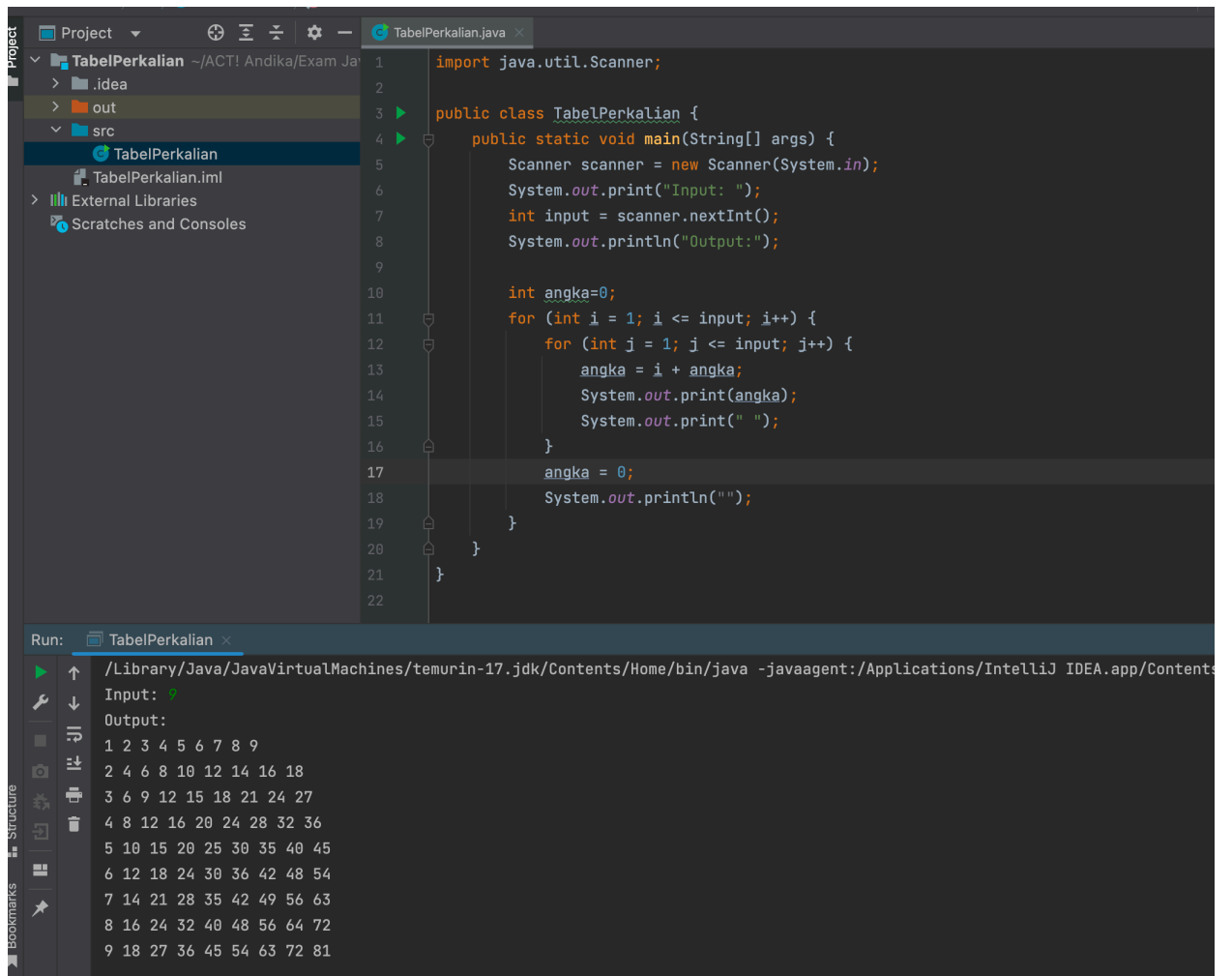
Input: 5

Output:

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

Process finished with exit code 0

8. Cetak Tabel Perkalian



The screenshot displays the IntelliJ IDEA IDE with a project named 'TabelPerkalian'. The main editor shows the source code for 'TabelPerkalian.java', which uses a Scanner to take user input and prints a multiplication table. The Run window at the bottom shows the program's execution, including the command used to run it and the resulting output.

```
1 import java.util.Scanner;
2
3 public class TabelPerkalian {
4     public static void main(String[] args) {
5         Scanner scanner = new Scanner(System.in);
6         System.out.print("Input: ");
7         int input = scanner.nextInt();
8         System.out.println("Output:");
9
10        int angka=0;
11        for (int i = 1; i <= input; i++) {
12            for (int j = 1; j <= input; j++) {
13                angka = i + angka;
14                System.out.print(angka);
15                System.out.print(" ");
16            }
17            angka = 0;
18            System.out.println("");
19        }
20    }
21 }
22
```

Run: TabelPerkalian

```
/Library/Java/JavaVirtualMachines/temurin-17.jdk/Contents/Home/bin/java -javaagent:/Applications/IntelliJ IDEA.app/Contents
Input: 9
Output:
1 2 3 4 5 6 7 8 9
2 4 6 8 10 12 14 16 18
3 6 9 12 15 18 21 24 27
4 8 12 16 20 24 28 32 36
5 10 15 20 25 30 35 40 45
6 12 18 24 30 36 42 48 54
7 14 21 28 35 42 49 56 63
8 16 24 32 40 48 56 64 72
9 18 27 36 45 54 63 72 81
```