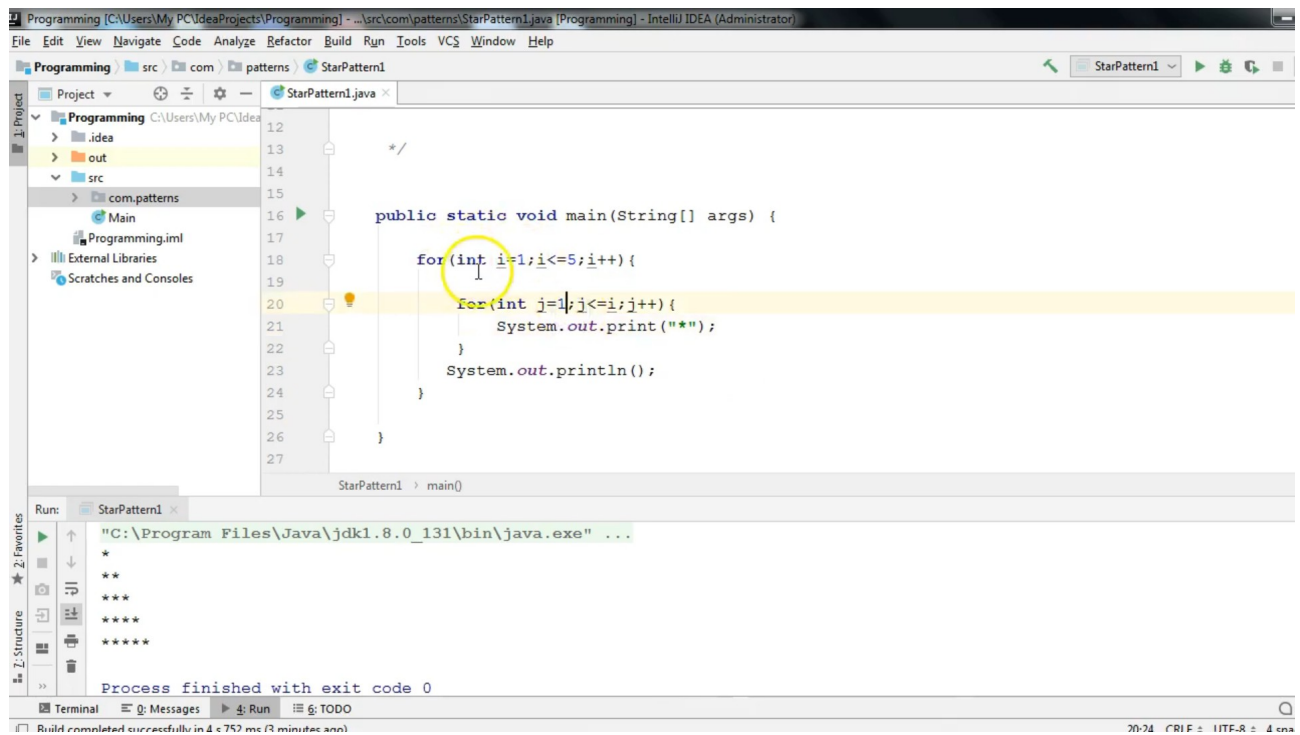


JAVA Programs: (Youtube ref:)

1. Fibonacci series:

```
fibonacci.java 63
1 package com.numbers.questions;
2
3 public class Fibonacci {
4
5     public static void main(String[] args) {
6
7         // 0 1 1 2 3 5 8 13 21
8
9         int first=0;
10        int second=1;
11        int n=20;
12
13        for(int i=1;i<=n;i++){
14
15            System.out.print(first+ " ");
16            int third=first+second;
17            first= second;
18            second= third;
19
20        }
21
22
23    }
```

2.Star Patterns:



The screenshot displays the IntelliJ IDEA IDE with the `StarPattern1.java` file open. The code defines a `main` method that prints a star pattern. The first loop, `for(int i=1; i<=5; i++)`, is highlighted with a yellow circle. The second loop, `for(int j=1; j<=i; j++)`, is highlighted with a yellow rectangle. The output of the program is shown in the Run console, displaying a star pattern with 5 rows. The process finished with exit code 0.

```
12
13
14
15
16 public static void main(String[] args) {
17
18     for(int i=1; i<=5; i++) {
19
20         for(int j=1; j<=i; j++) {
21             System.out.print("*");
22         }
23         System.out.println();
24     }
25
26 }
27
```

Run: StarPattern1

```
"C:\Program Files\Java\jdk1.8.0_131\bin\java.exe" ...
*
**
***
****
*****

Process finished with exit code 0
```

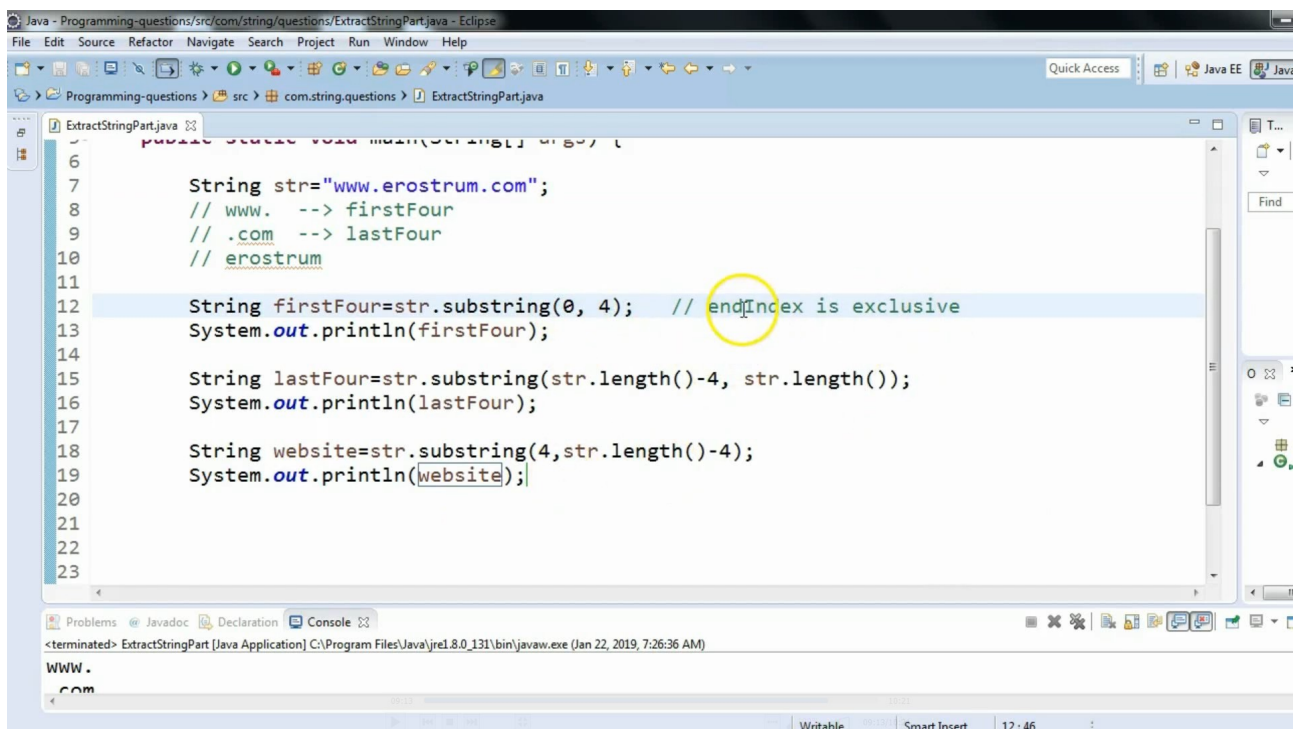
Terminal | Messages | Run | TODO

Build completed successfully in 4 s 752 ms (3 minutes ago)

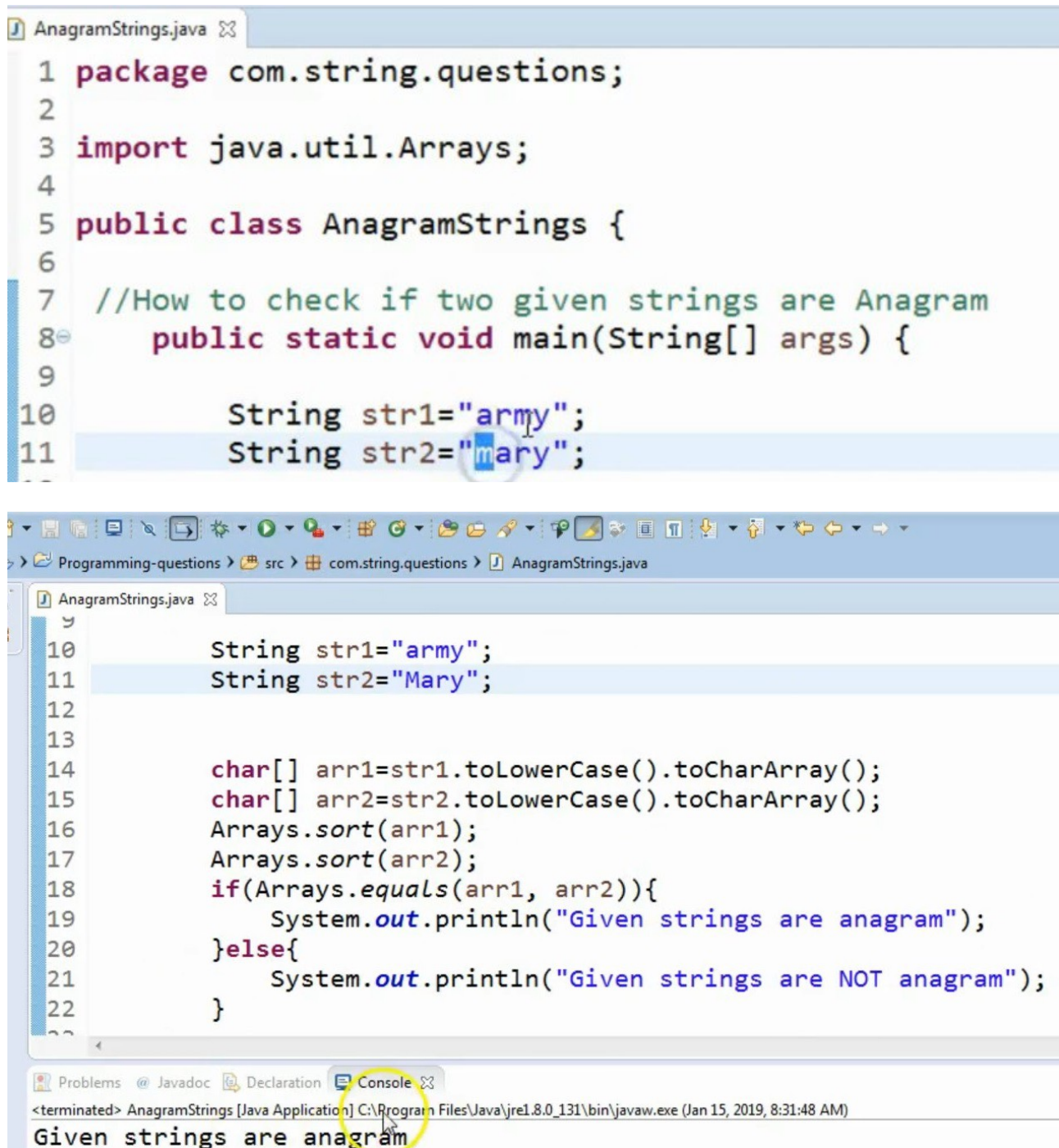
20:24 CRLF UTF-8 4 ena

3. Extract the string part:

```
1 package com.string.questions;
2
3 public class ExtractStringPart {
4
5     public static void main(String[] args) {
6
7         String str="www.erostrum.com";
8         // www. --> firstFour
9         // .com --> lastFour
10        // erostrum
11
12        String firstFour=str.substring(0, 4); // endIndex is exclusive
13        System.out.println(firstFour);
14    }
15 }
```



4.ANAGRAM:



The image shows a screenshot of an IDE with two panels. The top panel displays the source code for `AnagramStrings.java`. The code defines a package `com.string.questions`, imports `java.util.Arrays`, and defines a public class `AnagramStrings`. Inside the class, there is a `main` method that takes a `String[] args` parameter. The `main` method initializes two strings: `str1 = "army"` and `str2 = "mary"`. The bottom panel shows the same file with more code added. It converts both strings to lowercase and then to character arrays using `toLowerCase().toCharArray()`. It then sorts both arrays using `Arrays.sort()`. An `if` statement checks if the arrays are equal using `Arrays.equals(arr1, arr2)`. If they are equal, it prints "Given strings are anagram"; otherwise, it prints "Given strings are NOT anagram". The bottom status bar shows the console output: "Given strings are anagram".

```
1 package com.string.questions;
2
3 import java.util.Arrays;
4
5 public class AnagramStrings {
6
7     //How to check if two given strings are Anagram
8     public static void main(String[] args) {
9
10         String str1="army";
11         String str2="mary";
12
13
14         char[] arr1=str1.toLowerCase().toCharArray();
15         char[] arr2=str2.toLowerCase().toCharArray();
16         Arrays.sort(arr1);
17         Arrays.sort(arr2);
18         if(Arrays.equals(arr1, arr2)){
19             System.out.println("Given strings are anagram");
20         }else{
21             System.out.println("Given strings are NOT anagram");
22         }
23     }
24 }
```

<terminated> AnagramStrings [Java Application] C:\Program Files\Java\jre1.8.0_131\bin\javaw.exe (Jan 15, 2019, 8:31:48 AM)
Given strings are anagram