

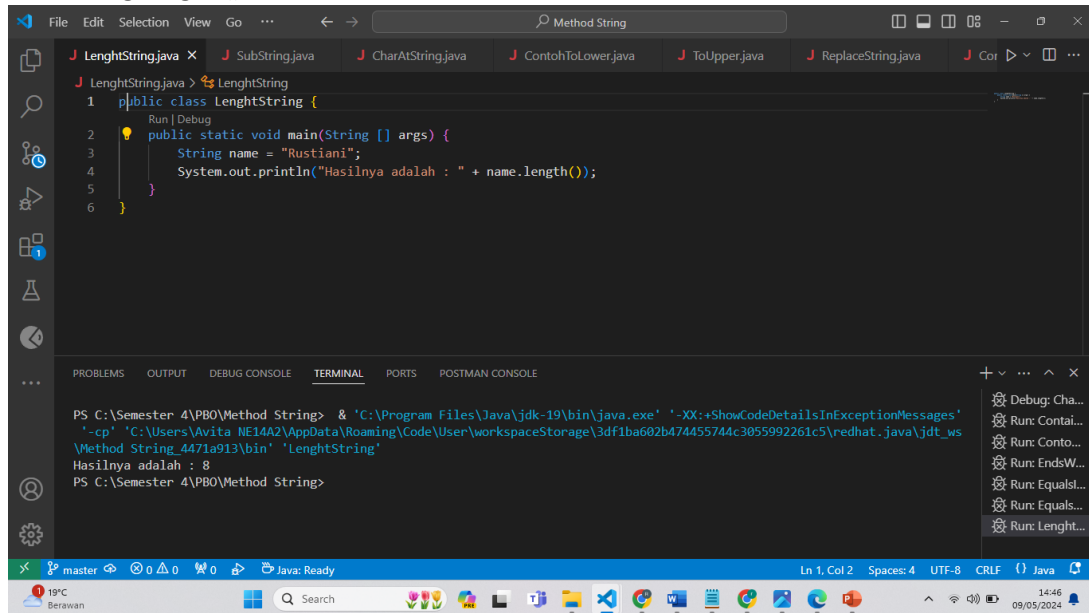
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Kelas : TI22C

TUGAS PEMROGRAMAN BERORIENTASI OBJEK SESI 9

1. Java String length ()

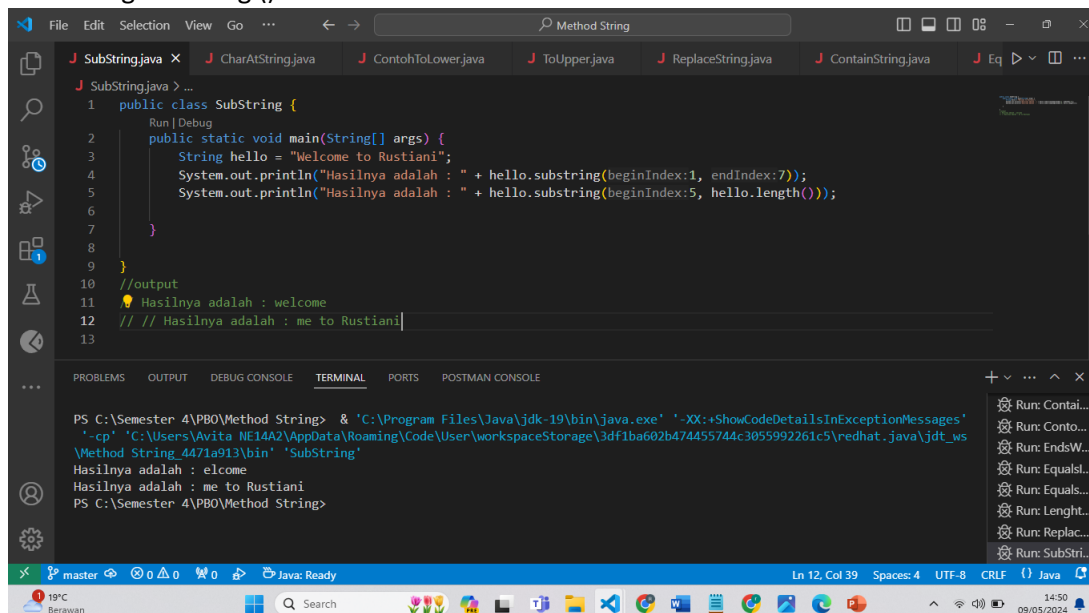


The screenshot shows an IDE with a Java file named `LenghtString.java`. The code defines a class `LenghtString` with a `main` method that sets a string `name` to "Rustiani" and prints its length using `name.length()`. The terminal output shows the command to run the program and the result: "Hasilnya adalah : 8".

```
public class LenghtString {  
    public static void main(String [] args) {  
        String name = "Rustiani";  
        System.out.println("Hasilnya adalah : " + name.length());  
    }  
}
```

```
PS C:\Semester 4\PBO\Method String> & 'C:\Program Files\Java\jdk-19\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages'  
'-cp' 'C:\Users\Avita NE14A2\AppData\Roaming\Code\User\workspaceStorage\3df1ba602b474455744c3055992261c5\redhat.java\jdt_ws  
\Method String 4471a913\bin' 'LenghtString'  
Hasilnya adalah : 8  
PS C:\Semester 4\PBO\Method String>
```

2. Java String substring ()

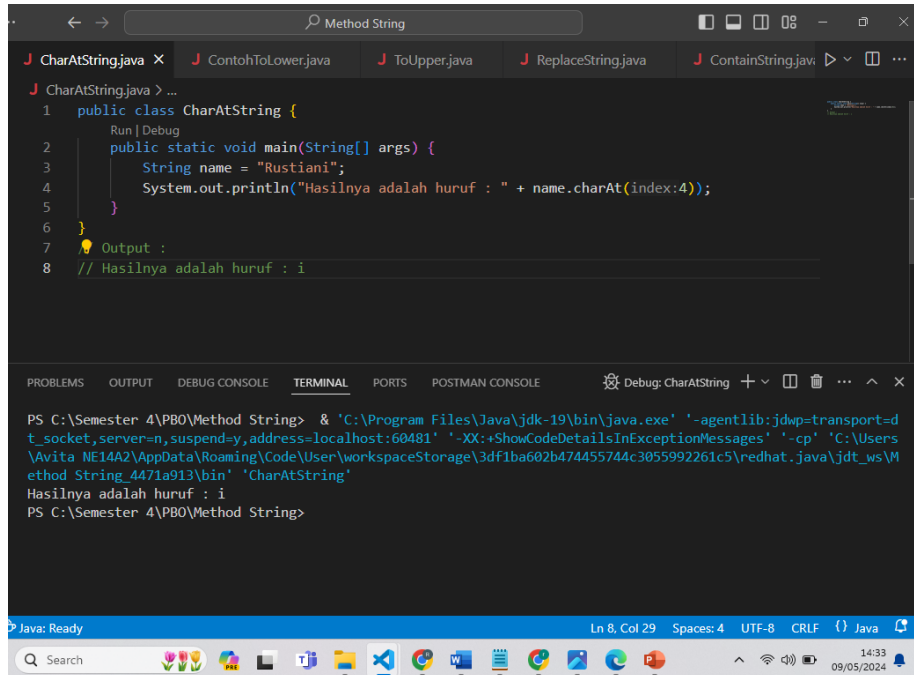


The screenshot shows an IDE with a Java file named `SubString.java`. The code defines a class `SubString` with a `main` method that sets a string `hello` to "Welcome to Rustiani". It then prints two substrings: one from index 1 to 7 ("welcome") and another from index 5 to the end ("me to Rustiani"). The terminal output shows the command to run the program and the results.

```
public class SubString {  
    public static void main(String[] args) {  
        String hello = "Welcome to Rustiani";  
        System.out.println("Hasilnya adalah : " + hello.substring(beginIndex:1, endIndex:7));  
        System.out.println("Hasilnya adalah : " + hello.substring(beginIndex:5, hello.length()));  
    }  
}
```

```
PS C:\Semester 4\PBO\Method String> & 'C:\Program Files\Java\jdk-19\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages'  
'-cp' 'C:\Users\Avita NE14A2\AppData\Roaming\Code\User\workspaceStorage\3df1ba602b474455744c3055992261c5\redhat.java\jdt_ws  
\Method String 4471a913\bin' 'SubString'  
Hasilnya adalah : elcome  
Hasilnya adalah : me to Rustiani  
PS C:\Semester 4\PBO\Method String>
```

3. Java String charAt ()



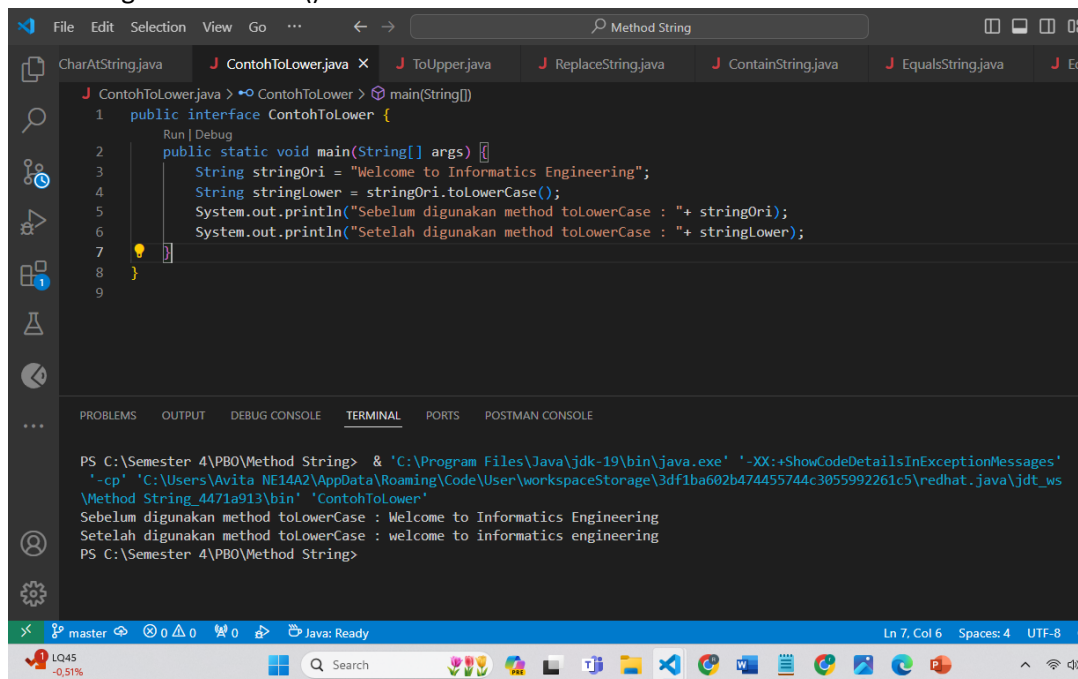
The screenshot shows an IDE with the file `CharAtString.java` open. The code defines a class `CharAtString` with a `main` method that takes an array of strings as input. It prints the character at index 4 of the first string. The terminal output shows the execution of the program, which prints "Hasilnya adalah huruf : i".

```
public class CharAtString {  
    public static void main(String[] args) {  
        String name = "Rustiani";  
        System.out.println("Hasilnya adalah huruf : " + name.charAt(index:4));  
    }  
}
```

Output :

```
// Hasilnya adalah huruf : i
```

4. Java String toLowerCase ()



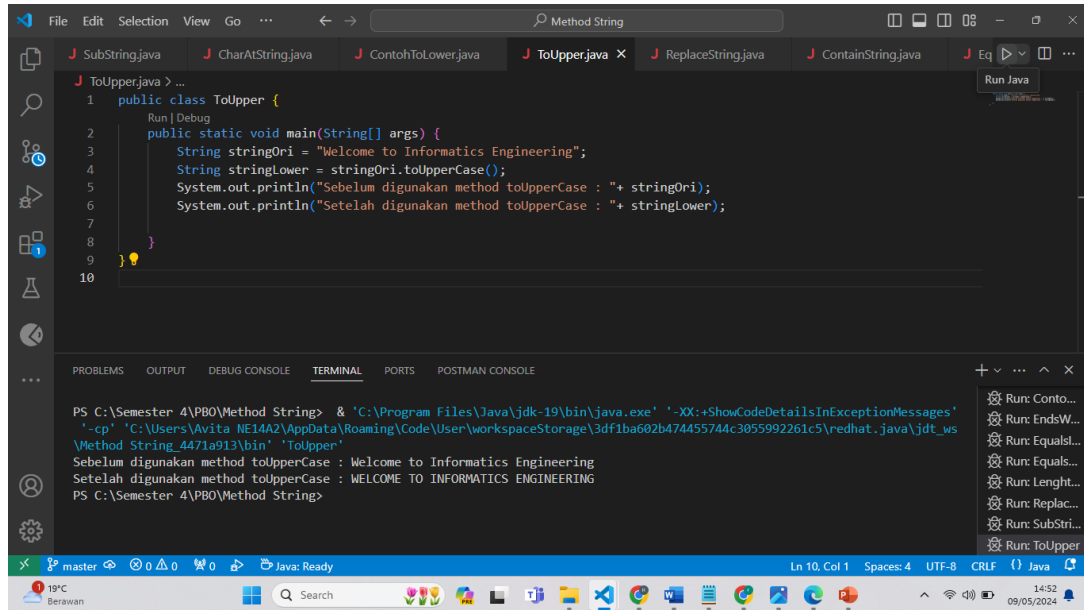
The screenshot shows an IDE with the file `ContohToLower.java` open. The code defines a class `ContohToLower` with a `main` method that takes an array of strings as input. It prints the original string and then the string converted to lowercase using the `toLowerCase` method. The terminal output shows the execution of the program, which prints "Sebelum digunakan method toLowerCase : Welcome to Informatics Engineering" and "Setelah digunakan method toLowerCase : welcome to informatics engineering".

```
public interface ContohToLower {  
    public static void main(String[] args) {  
        String stringOri = "Welcome to Informatics Engineering";  
        String stringLower = stringOri.toLowerCase();  
        System.out.println("Sebelum digunakan method toLowerCase : " + stringOri);  
        System.out.println("Setelah digunakan method toLowerCase : " + stringLower);  
    }  
}
```

Output :

```
Sebelum digunakan method toLowerCase : Welcome to Informatics Engineering  
Setelah digunakan method toLowerCase : welcome to informatics engineering
```

5. Java String toUpper ()



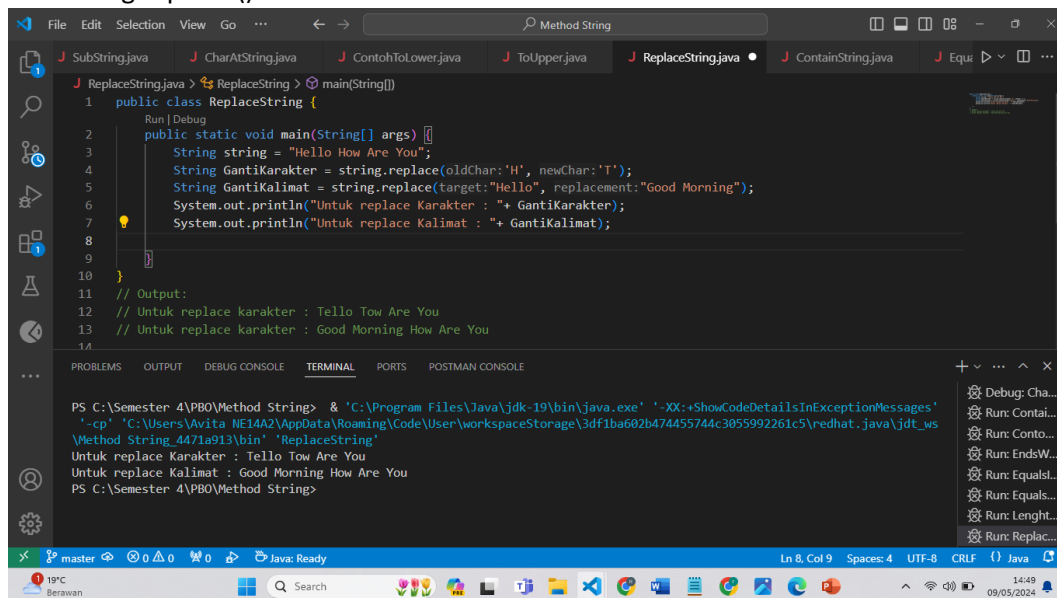
The screenshot shows an IDE with the file `ToUpper.java` open. The code defines a class `ToUpper` with a `main` method that demonstrates the `toUpperCase()` method. The terminal output shows the program's execution, displaying the original string and its uppercase version.

```
1 public class ToUpper {  
2     public static void main(String[] args) {  
3         String stringOri = "Welcome to Informatics Engineering";  
4         String stringLower = stringOri.toUpperCase();  
5         System.out.println("Sebelum digunakan method toUpperCase : "+ stringOri);  
6         System.out.println("Setelah digunakan method toUpperCase : "+ stringLower);  
7     }  
8 }  
9  
10
```

Terminal Output:

```
PS C:\Semester 4\PBO\Method String> & 'C:\Program Files\Java\jdk-19\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages'  
'-cp' 'C:\Users\Avita_ME14A2\AppData\Roaming\Code\User\workspaceStorage\3df1ba602b474455744c3055992261c5\redhat.java\jdt_ws  
\Method String_4471a913\bin' 'ToUpper'  
Sebelum digunakan method toUpperCase : Welcome to Informatics Engineering  
Setelah digunakan method toUpperCase : WELCOME TO INFORMATICS ENGINEERING  
PS C:\Semester 4\PBO\Method String>
```

6. Java String replace ()



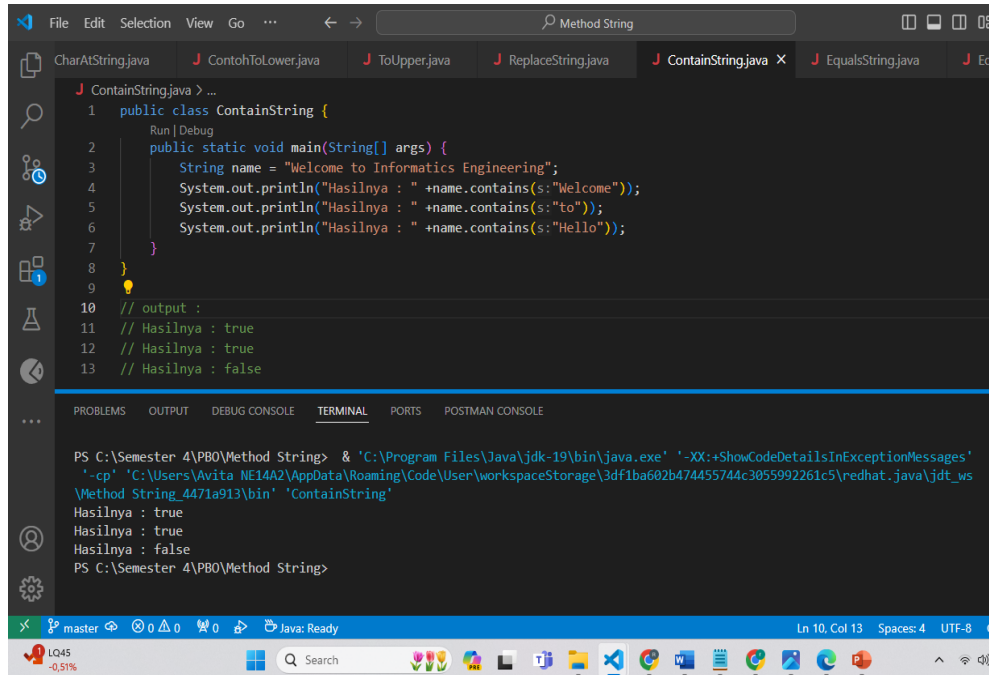
The screenshot shows an IDE with the file `ReplaceString.java` open. The code defines a class `ReplaceString` with a `main` method that demonstrates the `replace()` method. The terminal output shows the program's execution, displaying the original string and the result of replacing characters and substrings.

```
1 public class ReplaceString {  
2     public static void main(String[] args) {  
3         String string = "Hello How Are You";  
4         String GantiKarakter = string.replace(oldChar: 'H', newChar: 'T');  
5         String GantiKalimat = string.replace(target: "Hello", replacement: "Good Morning");  
6         System.out.println("Untuk replace Karakter : "+ GantiKarakter);  
7         System.out.println("Untuk replace Kalimat : "+ GantiKalimat);  
8     }  
9 }  
10  
11 // Output:  
12 // Untuk replace karakter : Tello Tow Are You  
13 // Untuk replace karakter : Good Morning How Are You  
14
```

Terminal Output:

```
PS C:\Semester 4\PBO\Method String> & 'C:\Program Files\Java\jdk-19\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages'  
'-cp' 'C:\Users\Avita_ME14A2\AppData\Roaming\Code\User\workspaceStorage\3df1ba602b474455744c3055992261c5\redhat.java\jdt_ws  
\Method String_4471a913\bin' 'ReplaceString'  
Untuk replace Karakter : Tello Tow Are You  
Untuk replace Kalimat : Good Morning How Are You  
PS C:\Semester 4\PBO\Method String>
```

7. Java String contains ()



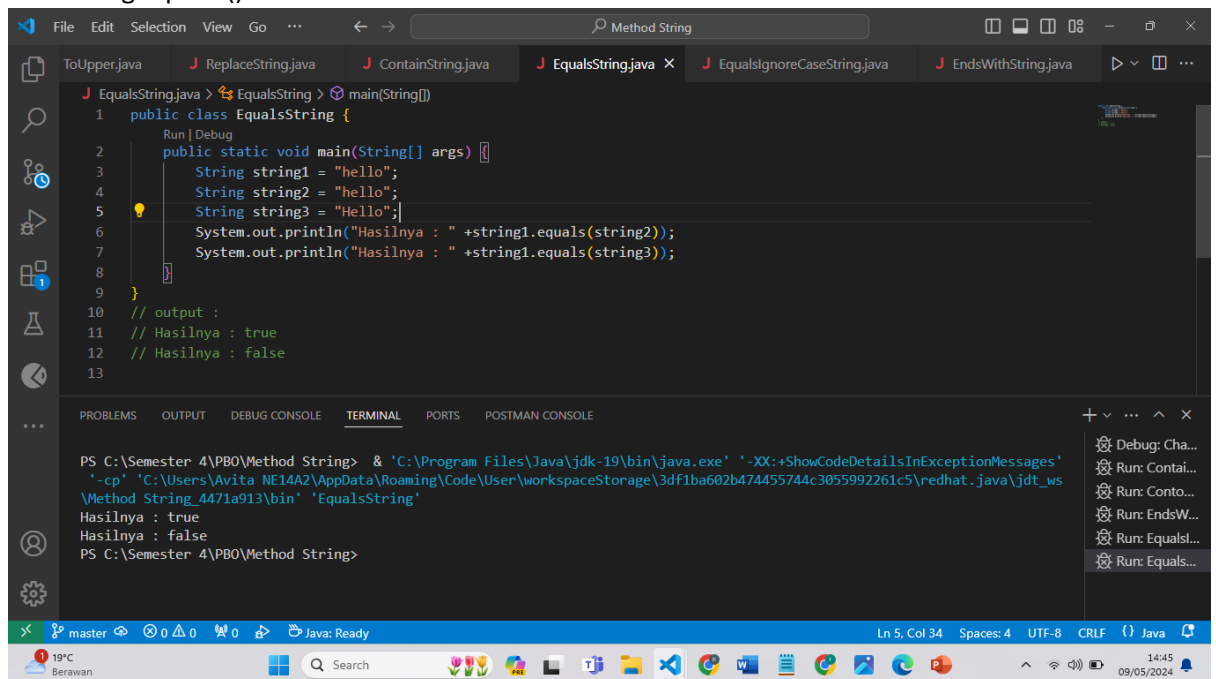
The screenshot shows an IDE with the file `ContainString.java` open. The code defines a class `ContainString` with a `main` method that checks if the string "Welcome to Informatics Engineering" contains "Welcome", "to", and "Hello". The output shows that "Welcome" and "to" are found, but "Hello" is not.

```
1 public class ContainString {
2     public static void main(String[] args) {
3         String name = "Welcome to Informatics Engineering";
4         System.out.println("Hasilnya : " + name.contains(s:"Welcome"));
5         System.out.println("Hasilnya : " + name.contains(s:"to"));
6         System.out.println("Hasilnya : " + name.contains(s:"Hello"));
7     }
8 }
9
10 // output :
11 // Hasilnya : true
12 // Hasilnya : true
13 // Hasilnya : false
```

The terminal output is as follows:

```
PS C:\Semester 4\PBO\Method String> & 'C:\Program Files\Java\jdk-19\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages'
'-cp' 'C:\Users\Avita NE14A2\AppData\Roaming\Code\User\workspaceStorage\3df1ba602b474455744c3055992261c5\redhat.java\jdt_ws
\Method String_4471a913\bin' 'ContainString'
Hasilnya : true
Hasilnya : true
Hasilnya : false
PS C:\Semester 4\PBO\Method String>
```

8. Java String equals ()



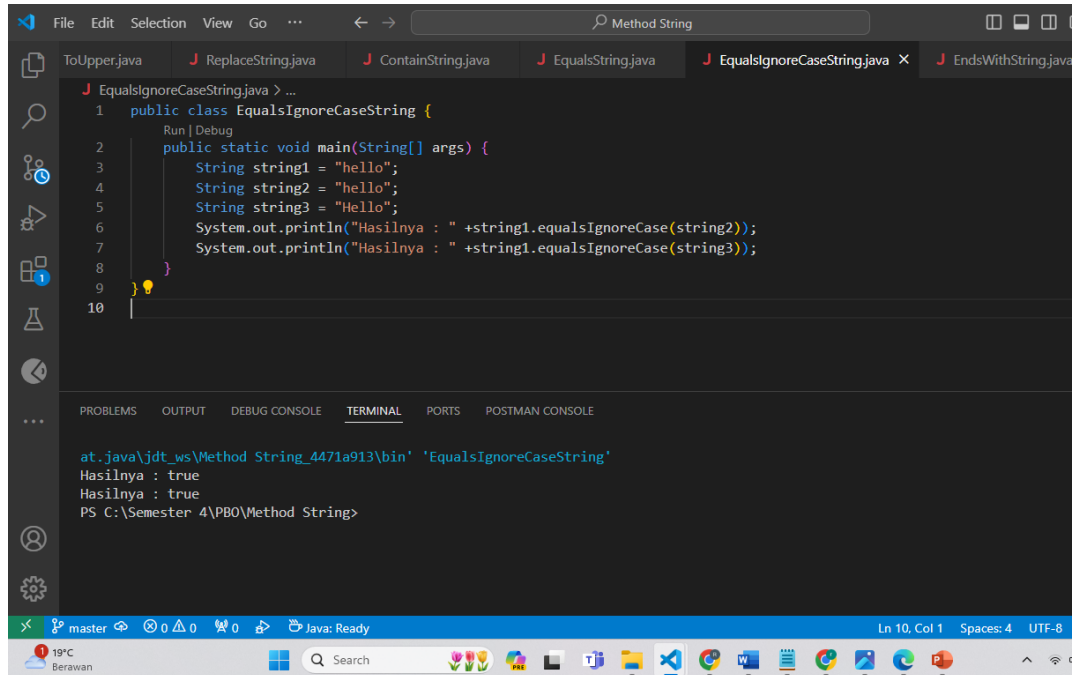
The screenshot shows an IDE with the file `EqualsString.java` open. The code defines a class `EqualsString` with a `main` method that checks if the string "hello" equals "hello" and "Hello". The output shows that "hello" equals "hello" but not "Hello".

```
1 public class EqualsString {
2     public static void main(String[] args) {
3         String string1 = "hello";
4         String string2 = "hello";
5         String string3 = "Hello";
6         System.out.println("Hasilnya : " + string1.equals(string2));
7         System.out.println("Hasilnya : " + string1.equals(string3));
8     }
9 }
10 // output :
11 // Hasilnya : true
12 // Hasilnya : false
13
```

The terminal output is as follows:

```
PS C:\Semester 4\PBO\Method String> & 'C:\Program Files\Java\jdk-19\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages'
'-cp' 'C:\Users\Avita NE14A2\AppData\Roaming\Code\User\workspaceStorage\3df1ba602b474455744c3055992261c5\redhat.java\jdt_ws
\Method String_4471a913\bin' 'EqualsString'
Hasilnya : true
Hasilnya : false
PS C:\Semester 4\PBO\Method String>
```

9. Java String equalsIgnoreCase()



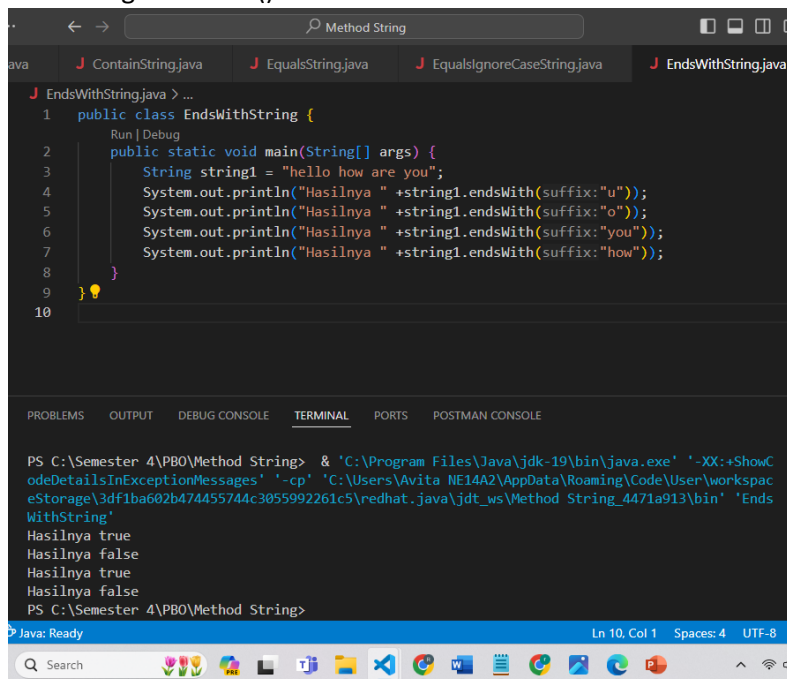
The screenshot shows an IDE with the file `EqualsIgnoreCaseString.java` open. The code defines a class with a `main` method that tests the `equalsIgnoreCase` method on three strings: "hello", "hello", and "Hello". The terminal output shows that all three comparisons return `true`.

```
1 public class EqualsIgnoreCaseString {  
2     public static void main(String[] args) {  
3         String string1 = "hello";  
4         String string2 = "hello";  
5         String string3 = "Hello";  
6         System.out.println("Hasilnya : " +string1.equalsIgnoreCase(string2));  
7         System.out.println("Hasilnya : " +string1.equalsIgnoreCase(string3));  
8     }  
9  
10 }
```

Terminal Output:

```
at.java\jdt_ws\Method String_4471a913\bin' 'EqualsIgnoreCaseString'  
Hasilnya : true  
Hasilnya : true  
PS C:\Semester 4\PBO\Method String>
```

10. Java String endsWith()



The screenshot shows an IDE with the file `EndsWithString.java` open. The code defines a class with a `main` method that tests the `endsWith` method on the string "hello how are you" with four different suffixes: "u", "o", "you", and "how". The terminal output shows that the first three comparisons return `true` and the last one returns `false`.

```
1 public class EndsWithString {  
2     public static void main(String[] args) {  
3         String string1 = "hello how are you";  
4         System.out.println("Hasilnya " +string1.endsWith(suffix:"u"));  
5         System.out.println("Hasilnya " +string1.endsWith(suffix:"o"));  
6         System.out.println("Hasilnya " +string1.endsWith(suffix:"you"));  
7         System.out.println("Hasilnya " +string1.endsWith(suffix:"how"));  
8     }  
9  
10 }
```

Terminal Output:

```
PS C:\Semester 4\PBO\Method String> & "C:\Program Files\Java\jdk-19\bin\java.exe" "-XX:+ShowCodeDetailsInExceptionMessages" "-cp" "C:\Users\Avita\NE14A2\AppData\Roaming\Code\User\workspaceStorage\3df1ba602b474455744c3055992261c5\redhat.java\jdt_ws\Method String_4471a913\bin" "EndsWithString"  
Hasilnya true  
Hasilnya false  
Hasilnya true  
Hasilnya false  
PS C:\Semester 4\PBO\Method String>
```