

```
StringExample.java - Notepad
File Edit View

public class StringExample {
    public static void main(String[] args) {
        String str1 = "The quick brown fox jumps over the lazy dog.";
        String str2 = "The brown fox";

        if (str1.contains("fox")) {
            System.out.println("String str1 contains the word 'fox'.");
        } else {
            System.out.println("String str1 does not contain the word 'fox'.");
        }

        if (str2.contains("fox")) {
            System.out.println("String str2 contains the word 'fox'.");
        } else {
            System.out.println("String str2 does not contain the word 'fox'.");
        }
    }
}
```

OUTPUT:

```
Specify an argument for a long option, you can use --name=value or
--name value.

C:\Users\suhasi\OneDrive\Documents\192011251>java StringExample.java
String str1 contains the word 'fox'.
String str2 contains the word 'fox'.
```

II.

PROGRAM:

```
StringEndsWithExample.java - Notepad
File Edit View

public class StringEndsWithExample {
    public static void main(String[] args) {
        String str1 = "The quick brown fox jumps over the lazy dog.";
        String str2 = "lazy dog.";

        if (str1.endsWith(str2)) {
            System.out.println("String str1 ends with the contents of string str2.");
        } else {
            System.out.println("String str1 does not end with the contents of string str2.");
        }
    }
}
```

OUTPUT:

```
C:\Users\suhas\OneDrive\Documents\192011251>javac StringEndsWithExample.java

C:\Users\suhas\OneDrive\Documents\192011251>java StringEndsWithExample
String str1 ends with the contents of string str2.

C:\Users\suhas\OneDrive\Documents\192011251>
```

III.

PROGRAM:

```
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File Edit View

import java.time.LocalDateTime;
import java.time.format.DateTimeFormatter;

public class DateTimeExample {
    public static void main(String[] args) {
        String str = "The quick brown fox jumps over the lazy dog.";
        LocalDateTime now = LocalDateTime.now();
        DateTimeFormatter formatter = DateTimeFormatter.ofPattern("yyyy-MM-dd HH:mm:ss");
        String formatDateTime = now.format(formatter);
        System.out.println("Current date and time: " + formatDateTime);
    }
}
```

OUTPUT:

```
Command Prompt

C:\Users\suhas\OneDrive\Documents\192011251>javac DateTimeExample.java

C:\Users\suhas\OneDrive\Documents\192011251>java DateTimeExample
Current date and time: 2023-03-29 22:14:19

C:\Users\suhas\OneDrive\Documents\192011251>
```

IV.

PROGRAM:

```
*Untitled - Notepad

File Edit View

public class AlphabetIndexExample {
    public static void main(String[] args) {
        String str = "The quick brown fox jumps over the lazy dog.";
        str = str.toLowerCase();
        int[] index = new int[26];

        for (int i = 0; i < str.length(); i++) {
            char c = str.charAt(i);
            if (c >= 'a' && c <= 'z') {
                index[c - 'a'] = i;
            }
        }

        for (int i = 0; i < index.length; i++) {
            char c = (char) ('a' + i);
            System.out.println(c + ": " + index[i]);
        }
    }
}
```

OUTPUT:

Command Prompt

```
C:\Users\suhas\OneDrive\Documents\192011251>javac AlphabetIndexExample.java
```

```
C:\Users\suhas\OneDrive\Documents\192011251>java AlphabetIndexExample
```

```
a: 36
```

```
b: 10
```

```
c: 7
```

```
d: 40
```

```
e: 33
```

```
f: 16
```

```
g: 42
```

```
h: 32
```

```
i: 6
```

```
j: 20
```

```
k: 8
```

```
l: 35
```

```
m: 22
```

```
n: 14
```

```
o: 41
```

```
p: 23
```

```
q: 4
```

```
r: 29
```

```
s: 24
```

```
t: 31
```

```
u: 21
```

```
v: 27
```

```
w: 13
```

```
x: 18
```

```
y: 38
```

```
z: 37
```

```
C:\Users\suhas\OneDrive\Documents\192011251>
```

V.

PROGRAM:

```
*Untitled - Notepad

File Edit View

public class StringReplaceExample {
    public static void main(String[] args) {
        String str = "The quick brown fox jumps over the lazy dog.";
        String regex = "fox";
        String replacement = "cat";

        String result = str.replaceAll(regex, replacement);

        System.out.println("Original string: " + str);
        System.out.println("Replaced string: " + result);
    }
}
```

OUTPUT:

```
Command Prompt

C:\Users\suhas\OneDrive\Documents\192011251>javac StringReplaceExample.java

C:\Users\suhas\OneDrive\Documents\192011251>java StringReplaceExample
Original string: The quick brown fox jumps over the lazy dog.
Replaced string: The quick brown cat jumps over the lazy dog.

C:\Users\suhas\OneDrive\Documents\192011251>_
```

VI.

PROGRAM:

```
*Untitled - Notepad
File Edit View

public class SubstringExample {
    public static void main(String[] args) {
        String str = "The quick brown fox jumps over the lazy dog.";
        int startIndex = 16;
        int endIndex = 19;

        String substring = str.substring(startIndex, endIndex);

        System.out.println("Original string: " + str);
        System.out.println("Substring between " + startIndex + " and " + endIndex + ": " + substring);
    }
}
```

OUTPUT:

```
C:\> Command Prompt

C:\Users\suhas\OneDrive\Documents\192011251>javac SubstringExample.java

C:\Users\suhas\OneDrive\Documents\192011251>java SubstringExample
Original string: The quick brown fox jumps over the lazy dog.
Substring between 16 and 19: fox

C:\Users\suhas\OneDrive\Documents\192011251>_
```

VII.

PROGRAM:



```
*Untitled - Notepad

File Edit View

public class TrimExample {
    public static void main(String[] args) {
        String str = "    The quick brown fox jumps over the lazy dog.    ";

        String trimmed = str.trim();

        System.out.println("Original string: \"" + str + "\"");
        System.out.println("Trimmed string: \"" + trimmed + "\"");
    }
}
```

OUTPUT:

```
Command Prompt

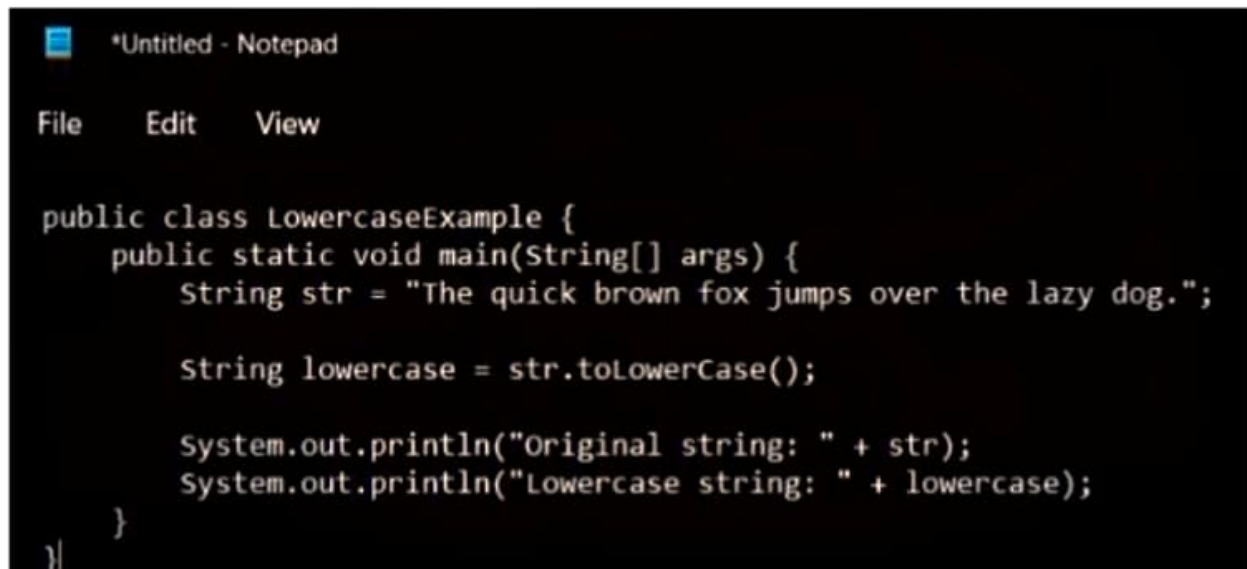
C:\Users\suhas\OneDrive\Documents\192011251>javac TrimExample.java

C:\Users\suhas\OneDrive\Documents\192011251>java TrimExample
Original string: "    The quick brown fox jumps over the lazy dog.    "
Trimmed string: "The quick brown fox jumps over the lazy dog."

C:\Users\suhas\OneDrive\Documents\192011251>_
```

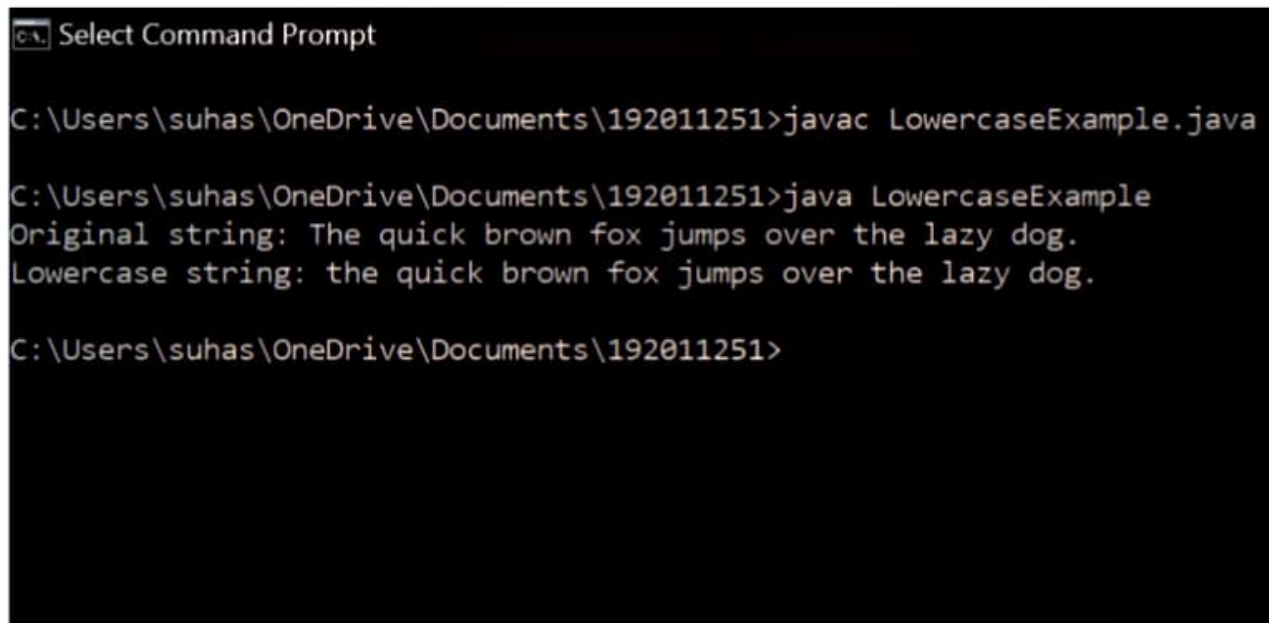
VIII.

PROGRAM:

A screenshot of a Notepad window titled '\*Untitled - Notepad'. The window has a menu bar with 'File', 'Edit', and 'View'. The code is written in a monospaced font. It defines a public class 'LowercaseExample' with a static 'main' method. Inside 'main', a 'String' variable 'str' is assigned the value 'The quick brown fox jumps over the lazy dog.'. Then, 'String lowercase' is assigned the result of 'str.toLowerCase()'. Finally, two 'System.out.println' statements are used to print the original and lowercase strings.

```
public class LowercaseExample {  
    public static void main(String[] args) {  
        String str = "The quick brown fox jumps over the lazy dog.";  
  
        String lowercase = str.toLowerCase();  
  
        System.out.println("Original string: " + str);  
        System.out.println("Lowercase string: " + lowercase);  
    }  
}
```

OUTPUT:

A screenshot of a Windows Command Prompt window titled 'Select Command Prompt'. The prompt shows the directory 'C:\Users\suhass\OneDrive\Documents\192011251'. The user enters 'javac LowercaseExample.java' to compile the code. Then, they enter 'java LowercaseExample' to run it. The output of the program is displayed: 'Original string: The quick brown fox jumps over the lazy dog.' followed by 'Lowercase string: the quick brown fox jumps over the lazy dog.' on the next line. The prompt returns to 'C:\Users\suhass\OneDrive\Documents\192011251>'.

```
C:\Users\suhass\OneDrive\Documents\192011251>javac LowercaseExample.java  
  
C:\Users\suhass\OneDrive\Documents\192011251>java LowercaseExample  
Original string: The quick brown fox jumps over the lazy dog.  
Lowercase string: the quick brown fox jumps over the lazy dog.  
  
C:\Users\suhass\OneDrive\Documents\192011251>
```

IX.

PROGRAM



```
*Untitled - Notepad

File Edit View

public class StringLengthExample {
    public static void main(String[] args) {
        String str = "The quick brown fox jumps over the lazy dog.";

        int length = str.length();

        System.out.println("Original string: " + str);
        System.out.println("Length of string: " + length);
    }
}
```

OUTPUT:

```
C:\> Command Prompt
C:\Users\suhas\OneDrive\Documents\192011251>javac StringLengthExample.java

C:\Users\suhas\OneDrive\Documents\192011251>java StringLengthExample
Original string: The quick brown fox jumps over the lazy dog.
Length of string: 44

C:\Users\suhas\OneDrive\Documents\192011251>_
```

X.

PROGRAM:



\*Untitled - Notepad

File Edit View

```
public class StringEqualityExample {  
    public static void main(String[] args) {  
        String str1 = "The quick brown fox jumps over the lazy dog.";  
        String str2 = "The quick brown fox jumps over the lazy dog.";  
  
        boolean isEqual = str1.equals(str2);  
  
        System.out.println("String 1: " + str1);  
        System.out.println("String 2: " + str2);  
        System.out.println("Are the strings equal? " + isEqual);  
    }  
}
```

OUTPUT:



Select Command Prompt

```
C:\Users\suhas\OneDrive\Documents\192011251>javac StringEqualityExample.java
```

```
C:\Users\suhas\OneDrive\Documents\192011251>java StringEqualityExample
```

```
String 1: The quick brown fox jumps over the lazy dog.
```

```
String 2: The quick brown fox jumps over the lazy dog.
```

```
Are the strings equal? true
```

```
C:\Users\suhas\OneDrive\Documents\192011251>
```