

JAVA STRING HANDLING



STRING CLASS METHODS

- **STRING LENGTH**
- **STRING CONCATENATION (YOU ALREADY KNOW THAT)**
- **COMPARING STRINGS**
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- **LOWERCASE/UPPERCASE CONVERSIONS**
- **STRING REPLACEMENTS**
- **STRING SEARCH**

STRING LENGTH

```
public class HelloWorld2
{
    public static void main(String[] args)
    {
        String str1 = "Hello Unipi World!";
        System.out.println(str1);
        System.out.print("String Length :" );
        System.out.println(str1.length());
    }
}
```

C:\Windows\system32\cmd.exe

Microsoft Windows [Version 6.1.7601]
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C:\Users\timmy>cd e:\myjavaprogs

C:\Users\timmy>cd..

C:\Users>cd..

C:\>e:

e:\myjavaprogs>javac HelloWorld2.java

e:\myjavaprogs>java HelloWorld2

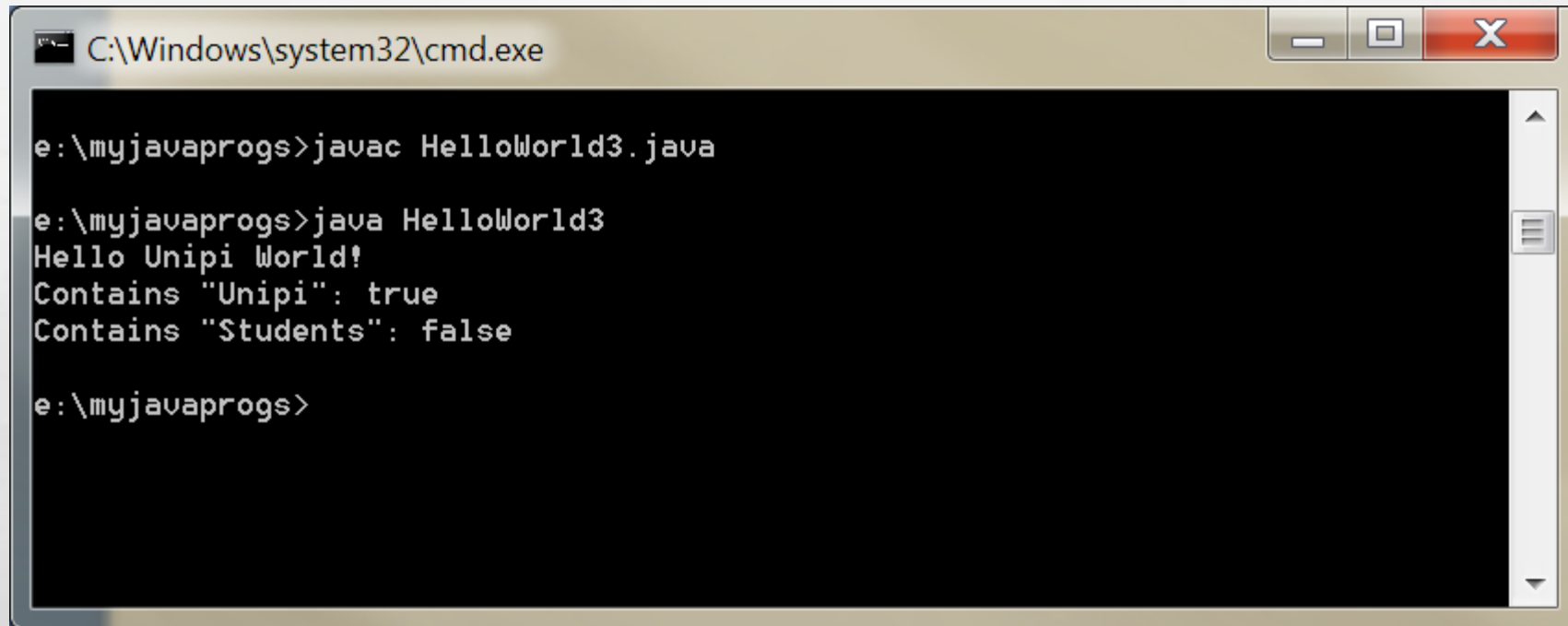
Hello Unipi World!

String Length :18

e:\myjavaprogs>

STRING SEARCH

```
public class HelloWorld3
{
    public static void main(String[] args)
    {
        String str1 = "Hello Unipi World!";
        System.out.println(str1);
        System.out.println("Contains \"Unipi\": "+str1.contains("Unipi"));
        System.out.println("Contains \"Students\": "+str1.contains("Students"));
    }
}
```

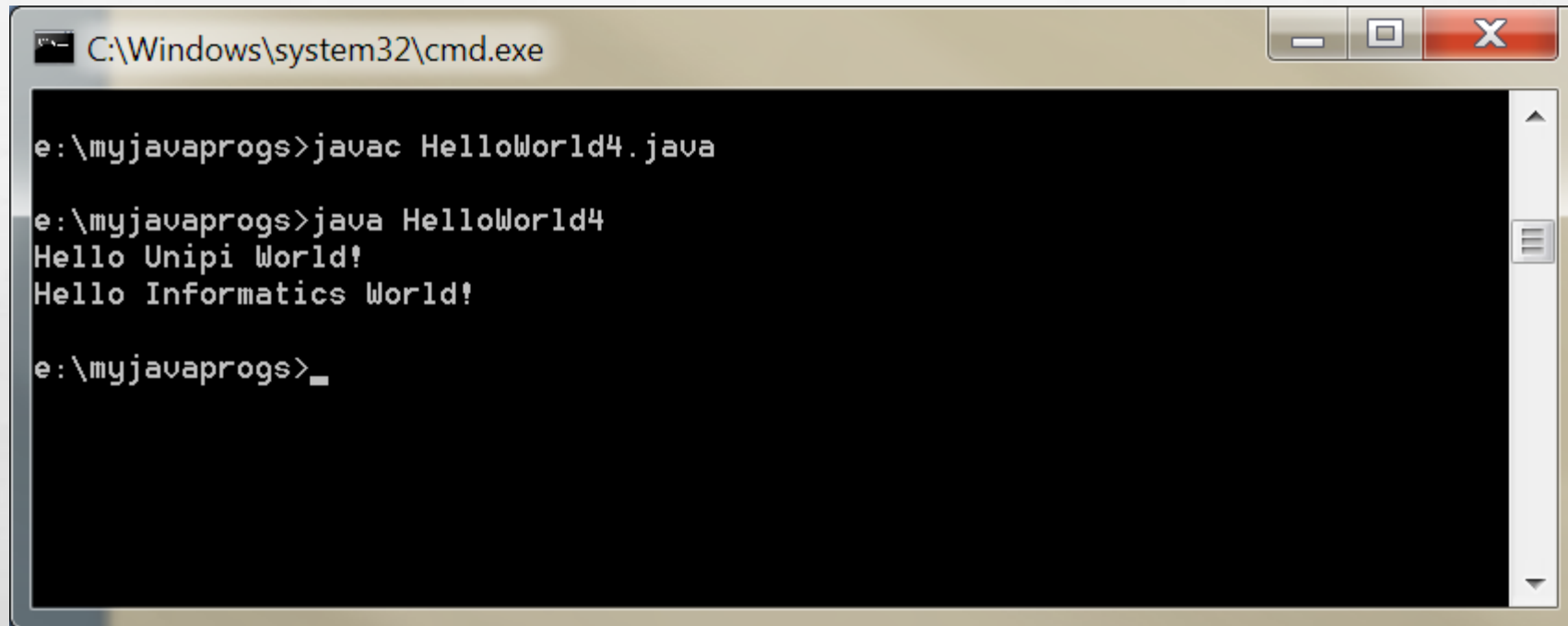


A screenshot of a Windows command prompt window. The title bar shows the path `C:\Windows\system32\cmd.exe`. The window contains the following text:

```
e:\myjavaprogs>javac HelloWorld3.java  
  
e:\myjavaprogs>java HelloWorld3  
Hello Unipi World!  
Contains "Unipi": true  
Contains "Students": false  
  
e:\myjavaprogs>
```

STRING REPLACE

```
public class HelloWorld4
{
    public static void main(String[] args)
    {
        String str1 = "Hello Unipi World!";
        System.out.println(str1);
        String replaceString=str1.replace("Unipi","Informatics");
        System.out.println(replaceString);
    }
}
```



A screenshot of a Windows command prompt window. The title bar reads "C:\Windows\system32\cmd.exe". The window contains the following text:

```
e:\myjavaprogs>javac HelloWorld4.java  
  
e:\myjavaprogs>java HelloWorld4  
Hello Unipi World!  
Hello Informatics World!  
  
e:\myjavaprogs>_
```

The window has a standard Windows interface with minimize, maximize, and close buttons in the top right corner. The background of the window is black, and the text is white. A vertical scrollbar is visible on the right side of the window.

STRING INDEXOF 1/2

No.	Method	Description
1	<code>int indexOf(int ch)</code>	returns index position for the given char value
2	<code>int indexOf(int ch, int fromIndex)</code>	returns index position for the given char value and from index
3	<code>int indexOf(String substring)</code>	returns index position for the given substring
4	<code>int indexOf(String substring, int fromIndex)</code>	returns index position for the given substring and from index

STRING INDEXOF 2/2

```
public class HelloWorld5
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        String str1 = "Hello Unipi World!";
```

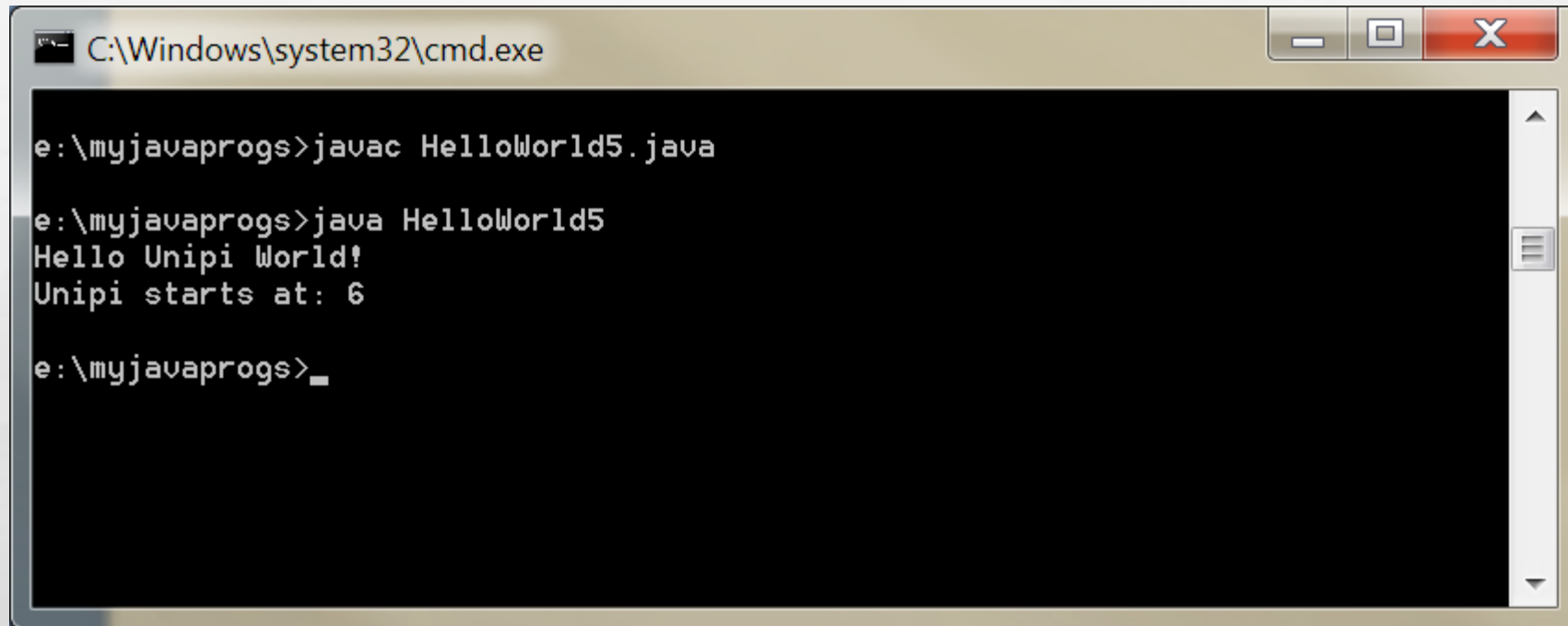
```
        System.out.println(str1);
```

```
        int index1=str1.indexOf("Unipi");
```

```
        System.out.println("Unipi starts at: "+index1);
```

```
    }
```

```
}
```

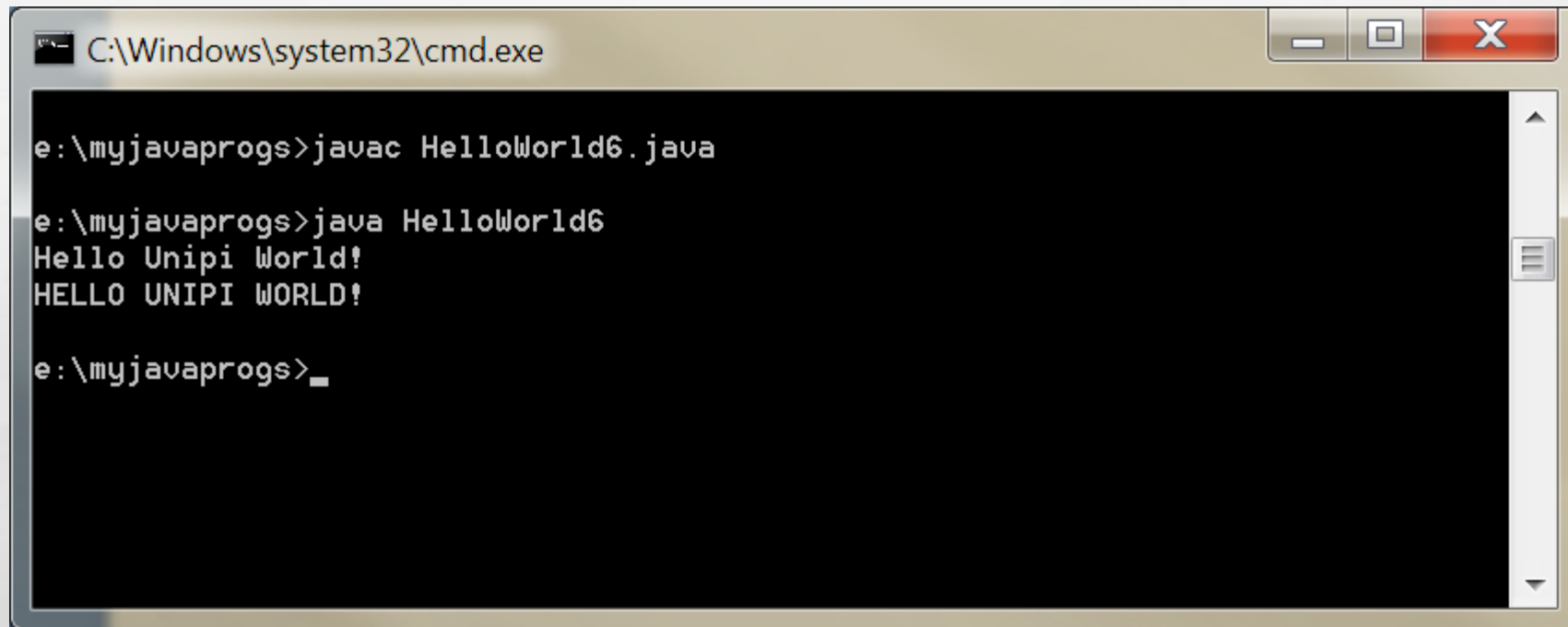
A screenshot of a Windows command prompt window. The title bar reads "C:\Windows\system32\cmd.exe". The window contains the following text:

```
e:\myjavaprogs>javac HelloWorld5.java  
  
e:\myjavaprogs>java HelloWorld5  
Hello Unipi World!  
Unipi starts at: 6  
  
e:\myjavaprogs>_
```

The window has standard Windows window controls (minimize, maximize, close) in the top right corner. The background of the slide is a light blue sky with a white cloud, and there is a solid red horizontal bar at the bottom.

STRING UPPERCASE

```
public class HelloWorld6
{
    public static void main(String[] args)
    {
        String str1 = "Hello Unipi World!";
        System.out.println(str1);
        String strlupper=str1.toUpperCase();
        System.out.println(strlupper);
    }
}
```



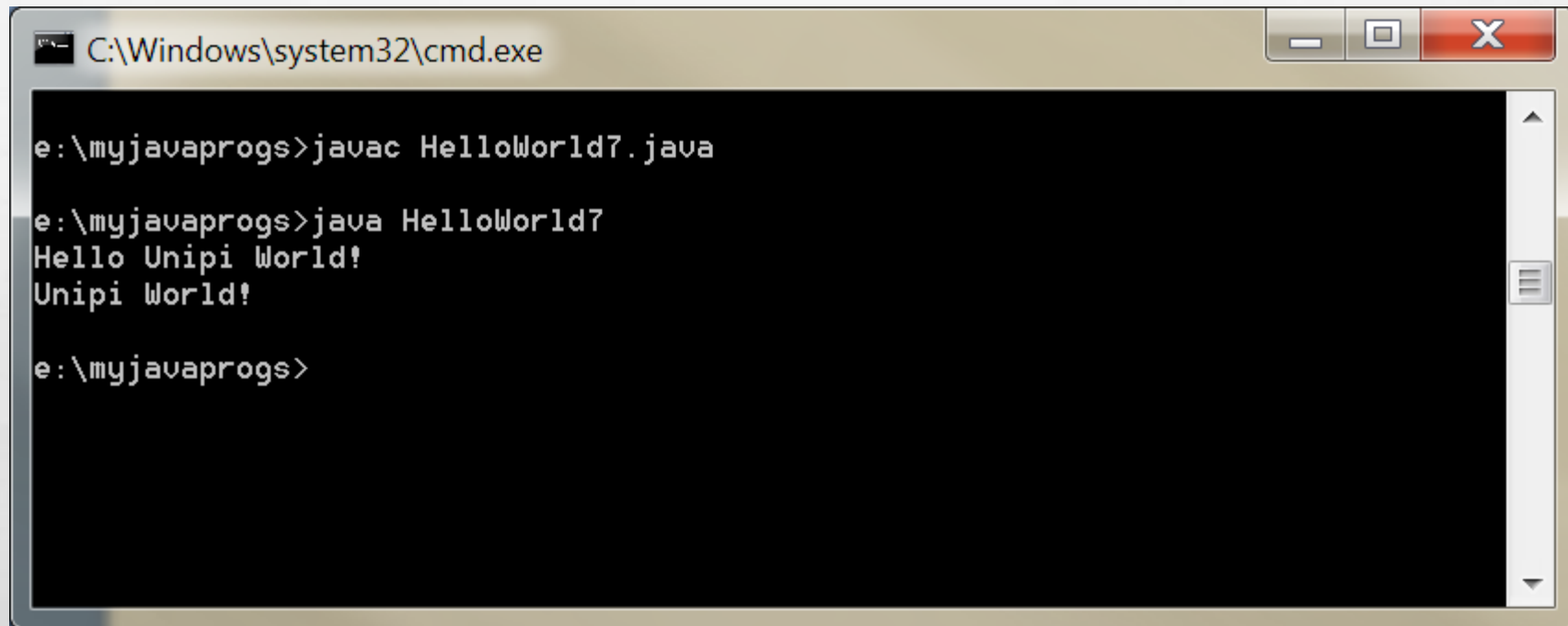
A screenshot of a Windows command prompt window. The title bar reads "C:\Windows\system32\cmd.exe". The window contains the following text:

```
e:\myjavaprogs>javac HelloWorld6.java  
  
e:\myjavaprogs>java HelloWorld6  
Hello Unipi World!  
HELLO UNIPI WORLD!  
  
e:\myjavaprogs>_
```

The output shows the successful compilation of a Java file and its execution, which prints two lines of text: "Hello Unipi World!" and "HELLO UNIPI WORLD!".

SUBSTRING

```
public class HelloWorld7
{
    public static void main(String[] args)
    {
        String str1 = "Hello Unipi World!";
        System.out.println(str1);
        String sbstr1 = str1.substring(6, 18);
        System.out.println(sbstr1);
    }
}
```



A screenshot of a Windows command prompt window. The title bar reads "C:\Windows\system32\cmd.exe". The window contains the following text:

```
e:\myjavaprogs>javac HelloWorld7.java  
  
e:\myjavaprogs>java HelloWorld7  
Hello Unipi World!  
Unipi World!  
  
e:\myjavaprogs>
```

The window has a standard Windows interface with minimize, maximize, and close buttons in the top right corner. The background of the window is black, and the text is white. The background of the entire image is a light gray with a faint, abstract pattern.

ITS TIME TO EXERCISE!

Given the string: "We are students of the Department of Informatics. All students should know how to program in Java and C."

Exercise1: Write a program that prints the substring of the above string that starts with "Department" and ends with "should know". (don't count with your fingers..)

Exercise2: Write a program that counts the number of "students" occurrences in the above string and prints it.