

Itec/MODR 2915/2635 EN

Fall 2020

Homework 1: Glendon working environment



Moodle: <https://eclass.yorku.ca>

Rstudio-server: <https://oldtown.glendon.yorku.ca/>

Username: yourlastname (always in small letters)

Password: your_student_number

Your web pages are at: **<http://oldtown.glendon.yorku.ca/~yourlastname>**

Please complete Exercise 1 before our first class.

Exercise 1:

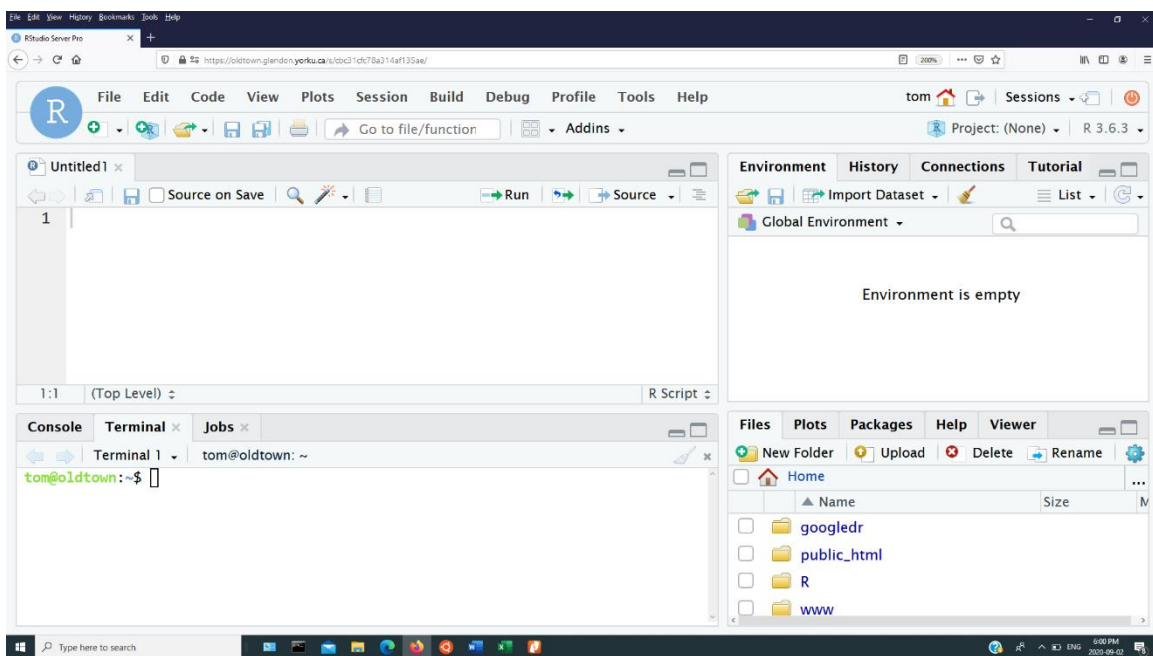
Login our server at: <https://oldtown.glendon.yorku.ca/>

Username: yourlastname (always in small letters)

Password: your_student_number

- For example, if your full name is "Peter Toft", then your web site is
<http://oldtown.glendon.yorku.ca/~toft/>
- If your last name is "Peter El Hare", then your web site is
<http://oldtown.glendon.yorku.ca/~elhare/> (last name is El Hare)
- There are 2 students D Chen and J Chen. So the web is for each student:
<http://oldtown.glendon.yorku.ca/~dchen/>
<http://oldtown.glendon.yorku.ca/~jchen/>
- **Your web pages are in the directory www:**
`/home/yourlastname/www`
- **Your home directory is /home/yourlastname**

You will have next this graphic, or graphical user interface (GUI) below:



Click on "terminal" to activate that console in order to type command line (CLI), followed by "return" key. So we are giving a command to the computer (operating system) by typing a text (a keyword); more on Human-computer interaction.

Utility	Description
ls	"list" files and directories
pwd	"print working directory"
cd	"change (your working) directory"
mkdir	"make directory"
rmdir	"remove directory"
cp	"copy" a file or directory
mv	"move" a file or directory (i.e., rename it)
rm	"remove" a file (i.e., delete it)

Displaying Text Files

It is often convenient to look at the contents of a text file without having to open it in an editor. Previously in this lab, we saw that `cat` can be used for this purpose, but it is most useful for short files that can be viewed all on one screen.

GNU/Linux provides several other utilities that are useful for "paging" through text files (i.e., for viewing files one page at a time). Several of these commands are outlined in the following table.

Command	Description
<code>more</code>	move through a file screen by screen (hit space for the next page, return for one more line)
<code>less</code>	a new and improved version that allows backward paging as well with the up-arrow, down-arrow, Page Up, and Page Dn.
<code>head</code>	show the first few lines of a file
<code>tail</code>	show the last few lines of a file

Exercise 2:

Definition (Wiki): A **command-line interface (CLI)** processes commands to a computer program in the form of lines of text. (Issue a command by typing text at a **terminal**, then press return.)

Try the following CLI:

- (a) `convert -size 800x800 canvas:white white.png`
- (b) `convert -size 800x800 canvas:blue white.png`
- (c) `convert -size 800x800 xc:white white.png`
- (d) `convert -size 800x800 xc:transparent transparent.png`
- (e) `https://trac.ffmpeg.org/wiki/Slideshow`
- (f) `youtube-dl URL`
- (g) `ffmpeg -i movie file.mp3`

- (h) `http://oldtown.glendon.yorku.ca/~teaching/2021/11/ex004.mp4`

- (i) `http://oldtown.glendon.yorku.ca/~teaching/2021/11/ex005.mp4`

#	Operation	What is the Command?
1	list files & directories.	
2	list all files & directories including the hidden ones.	
3	make a sub-directory called “my_file” in the home directory.	
4	change to names directory.	
5	take you to home directory. Assume you are in “my_file” directory.	
6	show the path for where you are in the directory.	
7	read the manual page of command “xyz”	
8	list the contents of the home directory, no matter where you are.	
9	copy “file1” to “file2”.	
10	delete my_file subdirectory.	
11	rename file1 to file2.	
12	display the content of a file called my_file1	
13	redirect the output to list1?	
14	count the number of lines, words, and characters in my_file1?	
15	count only the number of lines in my_file1?	
16	count only the number of words in my_file1?	
17	count only the number of characters in my_file1?	
18	display all lines of list1 & list2 containing the letter “p” & sort the result.	
19	find out about “sort”.	
20	display the names of all files in directory “ubuntu” and their permissions.	

HTML Introduction

What is HTML?

HTML is the standard markup language for creating Web pages.

- HTML stands for Hyper Text Markup Language
- HTML describes the structure of Web pages using markup
- HTML elements are the building blocks of HTML pages
- HTML elements are represented by tags
- HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
- Browsers do not display the HTML tags, but use them to render the content of the page

A Simple HTML Document

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

Example Explained

- The `<!DOCTYPE html>` declaration defines this document to be HTML5
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the document
- The `<title>` element specifies a title for the document
- The `<body>` element contains the visible page content
- The `<h1>` element defines a large heading
- The `<p>` element defines a paragraph

HTML Tags

HTML tags are element names surrounded by angle brackets:

<tagname>content goes here...</tagname>

- HTML tags normally come **in pairs** like <p> and </p>
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- The end tag is written like the start tag, but with a **forward slash** inserted before the tag name

Tip: The start tag is also called the **opening tag**, and the end tag the **closing tag**.

Exercise 3: html5

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>Ma passion pour les animaux</title>
  </head>

  <body>
    <h1>Titre de niveau 1</h1>
    <p>Voici mes animaux:</p>
    <ol>
      <li><strong>Dragon</strong></li>
      <li>chat</li>
      <li>giraffe</li>
    </ol>
  </body>
</html>
```

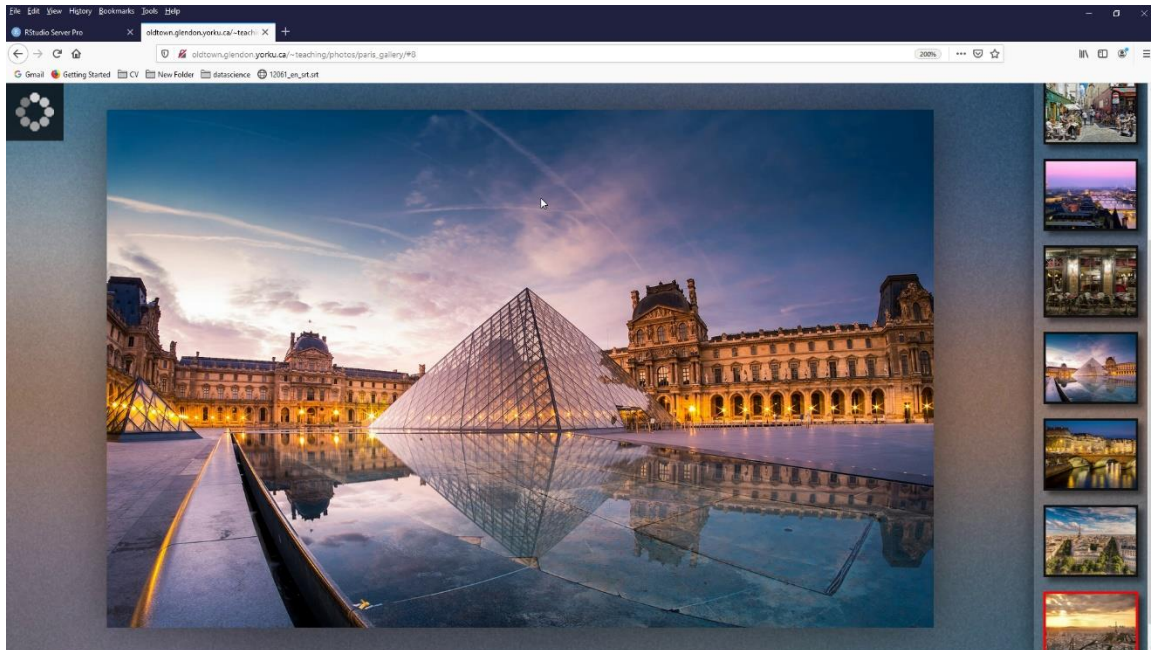
Make a web page with the html5 code given above to be displayed at:

<http://oldtown.glendon.yorku.ca/~yourlastname/examples/ex1>

Exercise 4: Making a photo gallery with CLI.

(a) View, repeat and explain each of the CLI given in this video:

<http://oldtown.glendon.yorku.ca/~teaching/2021/l1/ex004.mp4>



(b) What do the CLI do in this video:

http://oldtown.glendon.yorku.ca/~teaching/2021/l1/ex005_pwd_www.mp4

The program is fgallery

`fgallery input_directory output_directory`

Exercise 5:

Your web page is at: **<http://oldtown.glendon.yorku.ca/~yourlastname>**

Visit the following links:

- <http://oldtown.glendon.yorku.ca/~yourlastname/music/mp3>
 - What should you do so that the URL link above be renamed as:
<http://oldtown.glendon.yorku.ca/~yourlastname/music/french>
 - What should you do so that that your Paris album is at this location:
<http://oldtown.glendon.yorku.ca/~yourlastname/paris/memory/french>
- <http://oldtown.glendon.yorku.ca/~yourlastname/cv/index.html>
 - How would you replace the "blue box" with your own photo?
 - How would you replace "Welcome" by "Bienvenue!"
 - See: <https://youtu.be/ZRfsCQPGiS4>
 - or
http://oldtown.glendon.yorku.ca/~teaching/2021/syllabus/oldtown_rstudio_server_title_cv.mp4

Hint: Edit the file `index.html` at `/home/lastname/www/cv`

Replace `myphoto.png` by your own image with the same name

Here is the html and css codes for the web page above:

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="css/cv.css">
  <!-- Make for my students in Itec at Glendon College -->
</head>
<body>

<div id="header">
<h1> Welcome! </h1>
</div>

<h2> </h2>
<div id="section">

  <div id="left">
  <center>
  
  </center>
  </div>

  <div id = "right">
  <b>Hi!</b><p>

    Welcome to my website. I'm Peter The Great, a student at
    Glendon College. I am interested in computer music, machine
    learning, data visualization and French studies.
  <br><br>
  <a href="mailto:someone@yoursite.com">Contact me</a>
  <br>

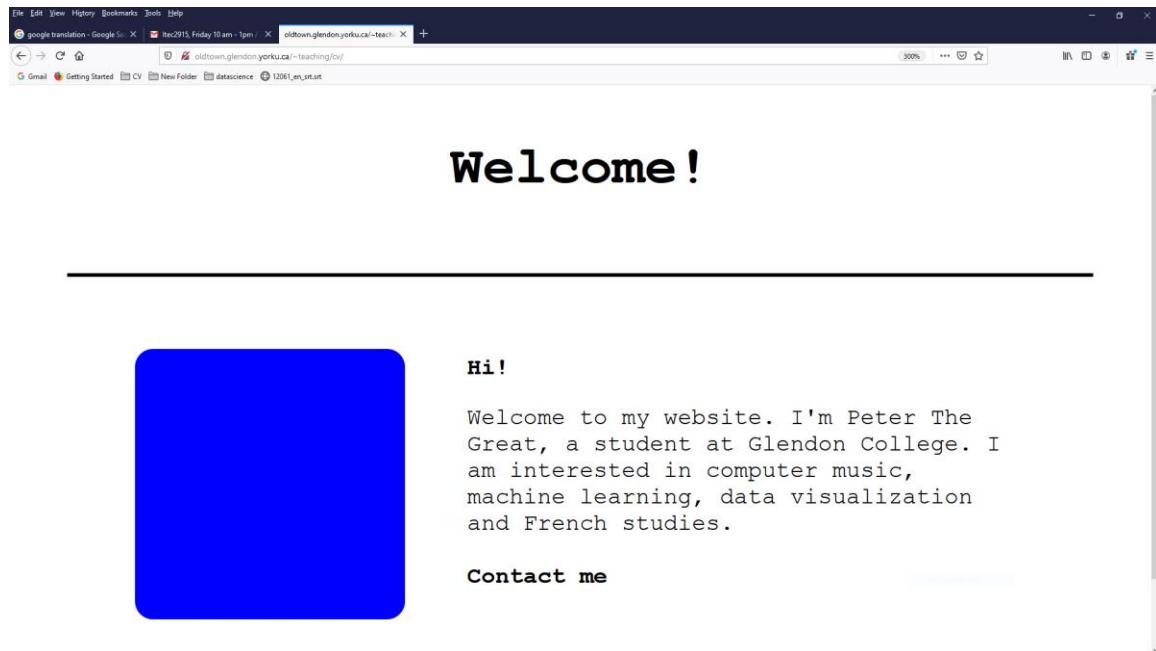
  </div>

</div>

</p>

<p>

</body>
</html>
```



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Links:

<https://www.w3schools.com/>