

CS 380

Lab 3, Sep 24

PHP and Rot13 encryption / decryption

In this lab you will create two a full, web-based rot13 encryption/decryption system. The system will have two parts: an html page with a form that has only a text input and a submit button; a PHP program to retrieve the text input, do a rot13 encryption on it and return the result.

Background:

rot13 is a very simple cypher. It simply shifts every character by 13 spaces in the alphabet (wrapping around as needed). Hence, if you apply it twice, you end up with the original text. (as long as the text consists of only letters or your system ignores everything but lower case letters).

For instance:

Original

the quick brown fox jumps over the lazy dog

Rot13 once:

gur dhvpx oebja sbk whzcf bire gur ynml qbt

Rot13 again:

the quick brown fox jumps over the lazy dog

Part 1:

Create an HTML page with a form with text input. Your form should be either in your public_html directory or some subdirectory of that. (Perhaps in a subdirectory named Lab3)

Part 2:

Create a PHP program to receive the form input and perform a rot13 transformation on it. You should only rot13 on lower case letters. Leaver everything else unchanged. The following PHP functions will be very useful:

ord(character) returns the ASCII value of the character

chr(integer): returns the character corresponding to the ASCII value.

\$string[3] returns the fourth character of a string, PHP is 0 indexed

strlen(\$string) returns the length of a string

Putting some of this together

```
$ss = "abcde";  
echo(ord($s[0])); // prints 97  
echo(chr(97)); // prints a  
echo(chr(ord($ss[2])); // prints c
```

There are other ways you might do this task in PHP. If you can find other ways, feel free. However, you can do a rot13 cypher using only the loops discussed in class and these few PHP functions.

IMPORTANT: recall that PHP only runs on the machine comet. So when you got to your html form, start at <http://russell.cs.brynmawr.edu/~YOU/myform.html>

What to hand in:

your PHP code — as far as you got in 90 minutes. It need not be complete or commented. Do your best

Send your code to gtowell380@cs.brynmawr.edu