A Unicode Mnemonic for Vowels with Diacritics

Abstract – A mnemonic for easily recalling the unicode entities of vowels with grave accents, acute accents, and circumflexes is described. Keywords: mnemonic, unicode, unicode entities, vowels, diacritics Published: 05-8-2019; Updated: 05-26-2019 © E. Garcia, PhD; admin@ minerazzi.com

Introduction

When investigating trends in the unicode system (Unicode, 2019), we observed that linear regression of the unicode numbers corresponding to the English letters [A-Z] in upper case versus those in lower case [a-z] yields a straight line with slope equal to 32 and correlation coefficient of 1. A cosine similarity of 1 is obtained when the data is represented as vectors.

We observed identical trend between vowels with the following diacritics: (a) grave accents, (b) acute accents, and (c) circumflexes. This inspired us to develop a mnemonic or memory device (Garcia, 2016; Wikipedia, 2019), for easily recalling the corresponding unicode entities. The methodology employed is stepwise described in the next section.

Procedure

Step 1: Multiply 32 times its digits, like this 32*3*2 = 192. Then,

memorize this	or this.
192	192
192 + 8 = 200	$192 + 2^3 = 200$
200 + 4 = 204	$200 + 2^2 = 204$
204 + 6 = 210	$204 + 2^2 + 2 = 210$
210 + 7 = 217	$210 + 2^2 + 3 = 217$

192	200	204	210	217
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Step 3: Add two additional rows, and increment row values by 1, like this:

192	200	204	210	217
193	201	205	211	218
194	202	206	212	219

Step 4: Add new rows between rows, with cell values increased by 32, like this:

192	200	204	210	217	
224	232	236	242	249	
193	201	205	211	218	
225	233	237	243	250	
194	202	206	212	219	
226	234	238	244	251	

Diacritic	Case	Unicode entities and rendering				
grave accent	upper	À	È	Ì	Ò	Ù
		À	È	Ì	Ò	Ù
		À	È	Ì	Ò	Ù
	lower	à	è	ì	ò	ù
		à	è	ì	ò	ù
		à	è	ì	ò	ù
acute accent		Á	É	Í	Ó	Ú
	upper	Á	É	Í	Ó	Ú
		Á	É	Í	Ó	Ú
	lower	á	é	í	ó	ú
		á	é	í	ó	ú
		á	é	í	ó	ú
circumflex .		Â	Ê	Î	Ô	Û
	upper	Â	Ê	Î	Ô	Û
		Â	Ê	Î	Ô	Û
	lower	â	ê	î	ô	û
		â	ê	î	ô	û
		â	ê	î	ô	û

Step 5: For the grand finale, add the "&#" and ";" symbols to convert numbers to unicode decimal notation. These correspond to the following upper and lower case vowels with diacritics.

Notice that we have included the alternative ampersand notation for those that prefer to use them.

Conclusion

We have presented a mnemonic for easily recalling the unicode entities of vowels with grave accents, acute accents, and circumflexes. The 32 differential between upper and lower cases can also be found in other diacritics, like vowels with tildes and umlauts, and not included in the present mnemonic. Mining the unicode system for other types of mnemonics is a work in progress. A relevant tool is available at http://www.minerazzi.com/tools/unicoder/unicoder.php.

References

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