














Knowing Some of the Keys

	Tilde Grave accent		Colon Semicolon		Control key
	Number sign The number 3		Double quote Single quote		Windows key
	Caret The number 6		Question mark Slash		Alternate key
	Asterisk The number 8		Vertical line Backslash		
	Underscore Hyphen / Minus sign		Shift key		

Typing European Characters

To type a Portuguese character like ã or ç, it is not necessary to use a Portuguese keyboard (see Fig. 1) or change to the Portuguese keyboard layout.

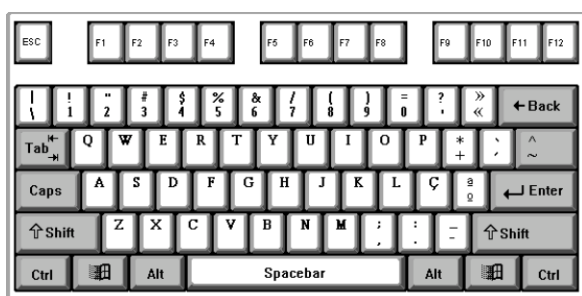


Fig. 1

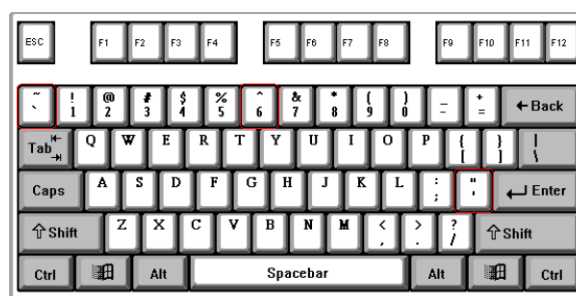



Fig. 2

Most computer users in Macao use the US keyboard (see Fig. 2). In order to type the special Portuguese characters (e.g., ã and ç) easily, what we need to do is to install the US-International keyboard layout first. Steps for installing this layout will be given in class.

Suppose the US-International keyboard layout is already installed. Actually, with the US-International keyboard layout we are able to type not only the special Portuguese characters, we can also type some other European characters, like ö and ü (these are German characters). Before we want to type those special European characters, make sure we are using the US-International keyboard layout. To do this, click on the keyboard icon on the taskbar , and make sure “US-International” is chosen. In what follows, we assume that the US-International keyboard layout is being used.

To type the special European characters using the US-International keyboard layout, we need to understand the structure of these characters.

Structure of some special European characters

À	õ	Ê	á	ç	ü
A + `	o + ~	E + ^	a + ´	c + ,	u + ¨


















From the previous table, we see that each such character is made up of an ordinary letter and an “additional symbol”, like “`” or “~” or “^” or “´” or “,” or “¨”.

To start typing a special European character, we have to press the key corresponding to the “additional symbol” first, and then press the corresponding letter key. Note that no matter the “additional symbol” is on the top or at the bottom, we always have to press the key corresponding to it first. Keys corresponding to the additional symbols are summarized in the following table.

Keys corresponding to the additional symbols using US-International keyboard layout

Additional symbol	`	~	^	'	,	..
Corresponding key	` Grave accent	~ Tilde	^ Caret	' Single quote	' Single quote	" Double quote

Examples (Assume that the US-International keyboard layout is being used)

- 1) To type à, press , and then press .
- 2) To type À, press , and then press  + .
- 3) To type ç, press , and then press .
- 4) To type ã, press  + , and then press .
- 5) To type Â, press  + , and then press  + .
- 6) To type ü, press  + , and then press .





To type 2 of the Portuguese characters, namely ¢ and ¢, we need to use their ASCII codes:

ASCII code of ¢ – 0170

ASCII code of ¢ – 0186.

That is to say, e.g., to type ¢, press Alt+0170. For entering the ASCII code, we have to use the number keys (make sure “Num Lock” is on) on the “numeric keypad”.

Remarks

- a) If we want to type, for example, the single quote, we need to press , and then press the spacebar. Use the same way to type ~ or ` or ^ or ".
- b) Don't mix up the Portuguese character “º” with the degree symbol “°”. The ASCII code of º is 0176.
- c) What would happen if we press  + , and then press ? Maybe we expect to see a character like ě. But the actual result is ~e. The reason is that the letter “ě” does not exist in any character set of European languages.
- d) In Microsoft Word, we might use some built-in shortcut keys to type some of the European characters. For example, we might use “Ctrl+~, a” and “Ctrl+^, a” to input respectively the characters “ã” and “â”. However, those shortcut keys work only for Word. The way of using the US-International keyboard layout works for any application (like Microsoft Excel or Notepad).