

**Universidade Fernando Pessoa**  
*Hardware and Sensors*

**Calculator using a Keypad**

1. Create a project, which will enable you to do multiplications using a Keypad.
  - a. Assume in a first instance, that you will only have two operands with a single digit. For example, “3 x 4 = 12”. Use the asterisk key to multiply (“x”) and cardinal for the equal (“=”).
  - b. Upgrade your code to handle operands with more than one digit, e.g., “25 x 11 = 275”.
  - c. Upgrade your code to reuse the last result as the first operand, i.e., assumes you can do the following operations consecutively: “25 x 11 = 275 x 3 = 825” (the sequence is: “2 7 5 \* 1 1 # \* 3 #).
2. Submit your code and designed circuit(s) using Fritzing<sup>1</sup> into the eLearning Hardware and Sensor dropbox.

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<sup>1</sup> <http://fritzing.org/download>