#-------------------------------------------------------------------------------

# Name: module1

# Purpose:

#

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#

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#-------------------------------------------------------------------------------

def main():

 #A few examples of a dictionary

 #First we define the dictionary

 #it will have nothing in it this time

 #ages = {}

 ages = {'Andy':59,'Paul':54}

 #Add a couple of names to the dictionary

 ages['Sue'] = 23

 ages['Peter'] = 19

 ages['Andrew'] = 78

 ages['Karren'] = 45

 #It returns TRUE if the dictionary has key-name in it

 #but returns FALSE if it doesn't.

 #Remember - this is how 'if' statements work -

 #they run if something is true

 #and they don't when something is false.

 if 'Sue' in ages:

 print ("Sue is in the dictionary. She is", ages['Sue'], "years old")

 else:

 print ("Sue is not in the dictionary")

 #Use the function keys() -

 #This function returns a list

 #of all the names of the keys.

 #E.g.

 print ("The following people are in the dictionary:")

 print (ages.keys())

 #You could use this function to

 #put all the key names in a list:

 keys = ages.keys()

 print ("Here is the LIST of keys :", keys)

 #You can also get a list

 #of all the values in a dictionary.

 #You use the values() function:

 print ("People are aged the following:", ages.values())

 #Put it in a list:

 values = ages.values()

 #You can sort lists, with the sort() function

 #It will sort all values in a list

 #alphabetically, numerically, etc...

 #You can't sort dictionaries -

 #they are in no particular order

 print (keys)

 print ("sorted keys",sorted(ages.keys()))

 print (values)

 print ("sorted values",sorted (ages.values()))

 #You can find the number of entries

 #with the len() function:

 print ("The dictionary has", len(ages), "entries in it")

if \_\_name\_\_ == '\_\_main\_\_':

 main()