**I.T.6 – Dictionary in a program**

**A dictionary in a program**

On line 2 in the screenshot below, a new dictionary is created using a variable named ‘pets’.

Within the Python language, curly brackets signify a dictionary. Dictionaries are structured using a ‘key:value’ pairing for each element, the ‘key’ is used to access the ‘value’ of the element. Elements are separated using commas between each element. Keys and values are separated using a colon symbol and can be a range of different types of data. In this example, the keys and values are both strings. The equals symbol then assigns the dictionary of elements to the variable ‘pets’.

**A function that uses the dictionary**

On line 7 in the screenshot, a function called ‘update’ is then used on the dictionary. The update function adds another element to the original dictionary. The element that needs to be added is placed in-between the curly brackets, with double quotation marks needed, as the keys and values are strings. In this example “dog2”:”Puppy” is added to the original dictionary.

**The result if the function running**

To prove the result of the function running on the dictionary. The original dictionary is printed to the console on line 4, which displays in the terminal. Then after the function is applied, the dictionary is printed again to the terminal, which now has been updated with ‘dog2:Puppy’ added to the dictionary.

Text

Description automatically generated