

# Python Challenge Cheat Sheet

## Required Modules

Tkinter, PyDictionary

Install PyDictionary using pip

## PyDictionary

These are the required PyDictionary commands

**X = PyDictionary.PyDictionary()** - Recommended to save the PyDictionary function to a variable.

**X.meaning("word")** - Get's the definitions of any word inside the brackets.

## Tkinter Commands

**Widgets:** Tk(), Label(), Text(), Entry(), Button()

### **Reference Key:**

**A** = The window it must display on.

**B** = The text it must display.

**C** = Co-ordinates for placing text. Eg: 0.0, "end"

**D** = Function's name without brackets - runs when button is clicked.

**X** = Variable name

**tkinter.Tk()** - Used to create a window.

**tkinter.Label(A, text = B, font = ("Font Name", Font Size))** - Displays text

**tkinter.Text(A, wrap = tkinter.WORD)** - Creates a Text box with wrapping set to WORD to prevent words being cut in half.

**X.insert("C", B)** - Inserts text into the Text box widget.

**X.delete("0.0", "end")** - Deletes everything inside the text box.

**tkinter.Entry(A)** - Creates an Entry widget for inputting data.

**X.get()** - Gets the value entered in the Entry widget.

**tkinter.Button(A, text = B, command = D)**

**X.grid(row = , column = , rowspan = , colspan = )**

**row** = Which row it must appear on, starts at 0.

**column** = Which column it must appear on, starts at 0.

**rowspan** = Number of rows it must take up.

**colspan** = Number of columns it must take up.

(only use the properties you need)

## **Extra (Lists, Dictionaries, For loops) (Optional)**

These are the required commands to get the output looking better.

PyDictionary outputs the definitions inside a Python dictionary. Python dictionaries use Keys and Values. The values are linked to the keys, so you are able to find different values by searching for the Key.

In order to modify the dictionaries output, you first need to change it to a list using:

**X = list(DictionaryOutput.items())**

You then need to use for loops to insert 1 line at a time. For loops let is manipulate each item in the list before inserting them.

**for key, item in X:** - Starts the for loop. Key and Item tells the loop that we'll be using data from those.

**(Everything below must be indented under the for loop)**

**TextWidget.insert("end", str(key) + "\n")** - This will insert the first key as a string. \n starts a new line.

**X2 = list(item)** - Creates another list for each item.

**for i in X2:** - Starts another for loop inside the other for loop to insert each item individually.

**(Everything below must be indented under the new X2 for loop)**

**TextWidget.insert("end", str(i).capitalize() + "\n")** - Inserts each item as a string and capitalises the first letter.

That's everything new you'll need to make your output look like mine. To add numbers, simply use a variable to act as a counter for each line. If you want to add extra line spaces simply insert another "\n".

If you can't figure it out, don't worry. Modifying lists and dictionaries can be really confusing which is why it's only optional.