Teacher Training Notes

Slide 46 – Comments

* Comments are useful when you want to leave notes on your code.
* This is useful for when you want to come back to your code to remember what it does.
* When multiple people are working on one bit of code, comments are also useful to understand what other people have done.

Slide 47 – Comments

* To write a comment in Python, you start the line with #, anything after this will be a comment and will not run when you run your script.
* As per the examples, you can write these before, after or on the same line as your code.

Slide 48 – Casting

* Casting is used to convert one data type to another data type.
* This is useful when concatenate two strings, as you cannot concatenate a string and a number so you may need to cast an integer to a string.
* Or when you want to add two numbers together but one is a string, you can cast the string to an integer to add them together.

Slide 49 - Casting — Integers

* To cast to an integer, as per the examples, you put int() and then the data into the brackets.

Slide 50 - Casting — Floats

* To cast to a float, as per the examples, you put float() and then the data into the brackets.

Slide 51 - Casting — Strings

* To cast to a string, as per the examples, you put string() and then the data into the brackets.

Slide 52 – Length

* To work out the length of a string, you can use the length function.

Slide 53 – Length

* You can use this on a variable or directly on a string as per the examples.

Slide 54 – Index

* The index is the position of the characters. Normally, a count begins at 1, in Python and most programming languages, the count always starts at 0.

Slide 55 – Index

* The word Hello, as shown, the first character H is 0, e is 1 and so on.

Slide 56 - Index

* By knowing the index, you can print out specific letters.
* So for word Charlie is stored in the variable name, the first print will print out ‘C’ as this has index 0 and the second print will print out ‘h’ as this has index 1.

Slide 57- Input

* To get information from the user, we can use an input. If the input is stored in a variable, whatever the user enters is stored in the variable.

Slide 58 - Input

* The first print in the example, will print Hello and whatever the name the user enters.
* The second will first get the user input for age and cast it to a integer so it can be used in the second variable age\_in\_10\_years when being added to 10.
* Lastly, it is all put together, as you are concatenating a string and the new age, the age has to be cast back into a string.

Slide 59 - Upper/Lower

* If you want to change the case of a string, you can use the upper or lower function.

Slide 60 - Upper/Lower

* You can use these either with a variable or directly on a string.

Slide 61 – Coding Time - Section C

* Now, it’s your time to try some coding, please refer to Section C on your worksheets.
* You’ll have the rest of the lesson to finish this as well as any other questions.