Working With Strings

A **string** is a series of alphanumeric characters which are treated as a single unit. Strings can be manipulated (worked with) in a number of ways. Complete the examples and record the output.

1. **Concatenation** - two or more strings can be joined together

    wordOne = "pine"

    wordTwo = "apple"

    print (wordOne + wordTwo)   *pineapple*

    The purpose of the **+** is: *to join strings together*

    print (wordOne * 5)   *pinepinepinepinepine*

    The purpose of the ***** is: *to repeat the string*

    fullWord = wordOne + wordTwo

    print (fullWord)   *pineapple*

    twoWords =wordOne + " " + wordTwo

    print (twoWords)   *pine apple*

2. **Substrings** - a portion of a string is known as a **substring**

    - these substrings can be manipulated or outputted

    - each letter in the string has a specific position called an **index**. The first index is 0, the second is 1, the third is 2, etc.

    word = "hello there"

    print (word [0])   *h*

    print (word [1])   *e*

    print (word [5])   *(space)*

    print (word [-1])   *e*   [-1] is the *last* character

    print (word [0: 3])*hel*

    print (word [6 : -1])   *ther*

    print (word [-3 : -1])   *er*

    print (word [2 : 4])   *ll*

    print (word [: 2]) *he*   The blank before the colon (**:**) is the *first* character

    print (word [2 :])*llo there*   The blank after the colon (**:**) is the *last* character

    smallWord = word [2 : 4]

    print (smallWord)   *ll*

Note:

When you see a substring[**a : b**] where **a** and **b** are two integers, the substring goes from character **a** to the character <u>before</u> **b**