6. EXAMPLES 2

Examples with the Plus Sign

Introduction

As we have already seen the Plus Sign is ***matched if there is one or more instances of the preceding character (or grouping) in a Regular Expression***.

And we will remember that if we wanted to search a text file for all instances of "Yippee", including "Yippe" and "Yippeeeeeee" (so the number of e's varies), we do:

```
RegEx_Pattern = "Yippe+"
```

And this would match with "Y", "I", "p", "p", and one or more "e"'s. This is slightly more compact than the equivalent Wildcard version we have seen ("`Yippee*`").

And the following Regular Expression:

```
RegEx_Pattern = "(abc)+"
```

will match any of these "abc", "abcabc", "abcabcabc", "abcabcabcabc", etc.

File Names

If we are looking for a file, and we don't know its name, but we do know the file type, we can use a wildcard, so, if the file could be:

`Greetings.docx`
`Hello.docx`
`Hi.docx`

And if we know it can't be "`.docx`", we can do the following:

```
RegEx_Pattern = "+\\.docx"
```

Character Classes

If we want to create a Regular Expression to match any String that has a mix of uppercase and lowercase characters, and has to at least one character, we do:

```
RegEx_Pattern = "[a-zA-Z]+"
```

And this would match "a", "x", "A", "X", "Ax", "Xa", "XXX","xxx","Xxx", etc.

If we want to create a Regular Expression to match any String that has a mix of numbers, uppercase, and lowercase characters, and has at least one character:

```
RegEx_Pattern = "[a-zA-Z0-9]+"
```

And this would match "a", "x", "A", "X", "5", "Ax", "Xa", "XXX","c3po","R2D2", etc.

And, for example, if we had a String "`XStringX`", we can match it as follows:

```
RegEx_Pattern = "X[a-zA-Z]+X"
```

So, this matches a String that starts with "X" followed by any combination of uppercase and lowercase characters ("`a-zA-Z`"), and it has to end with an "`X`", so it will also match with "XaX", "XAX", "XxX", "XXX", "XHelloX", "XGoodbyeX", etc.

Finally, if we were looking for HTML tags, e.g. "`<P>`" or "`<HEAD>`", we can do:

```
RegEx_Pattern = "<[a-zA-Z]+>"
```

So, this matches any String with at least one character, and enclosed in "<" and ">".