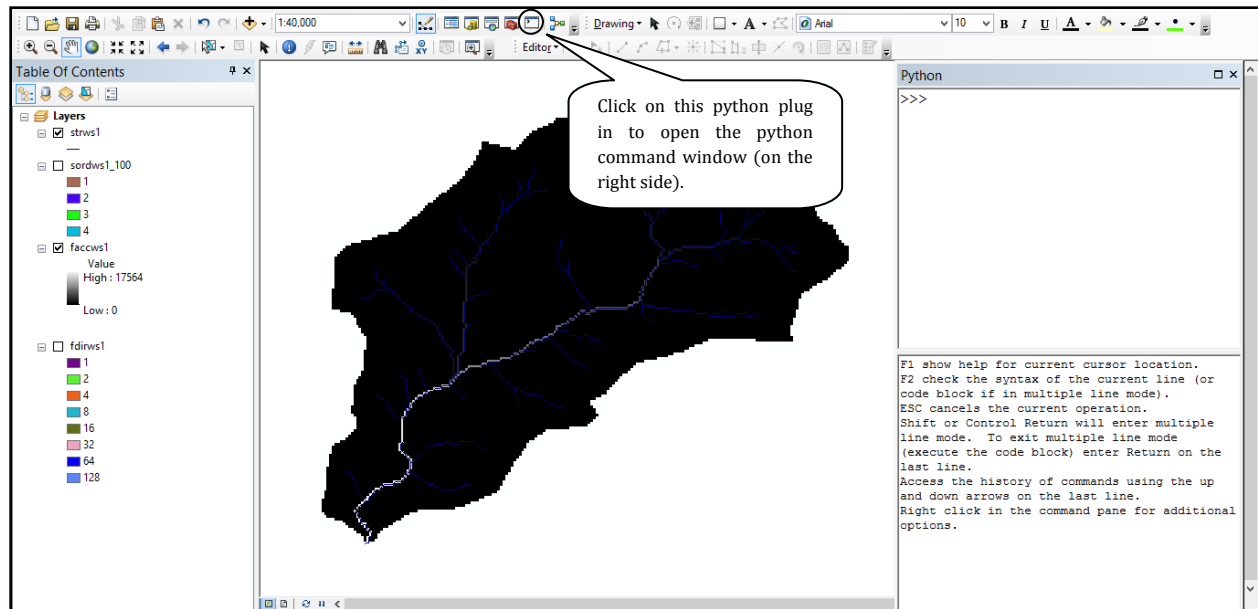
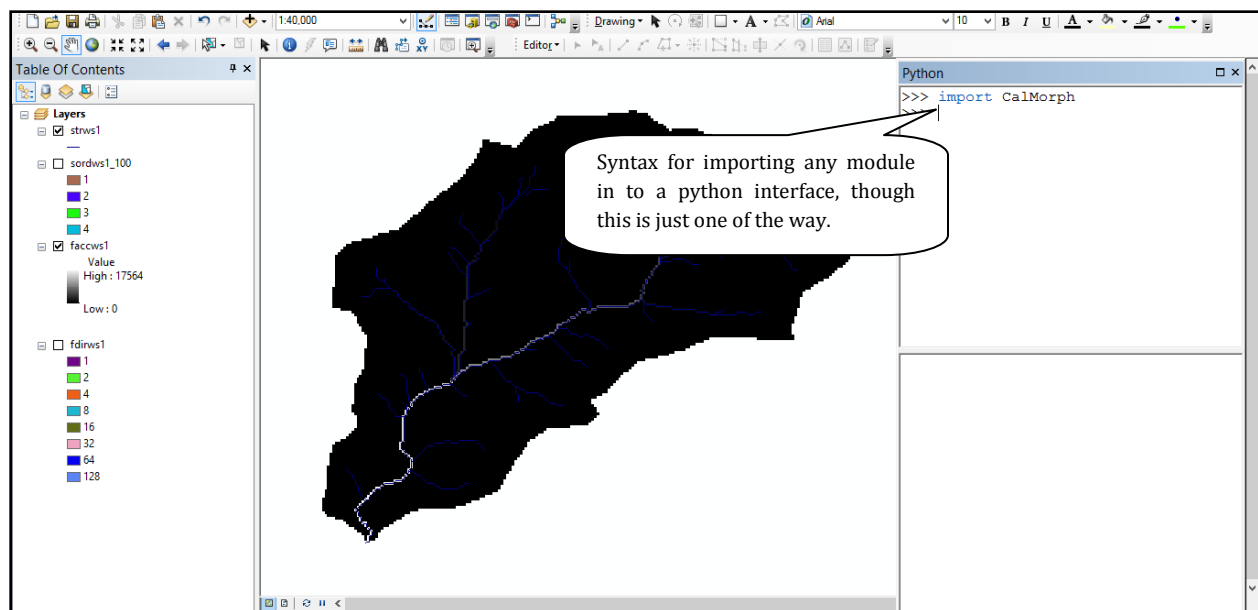


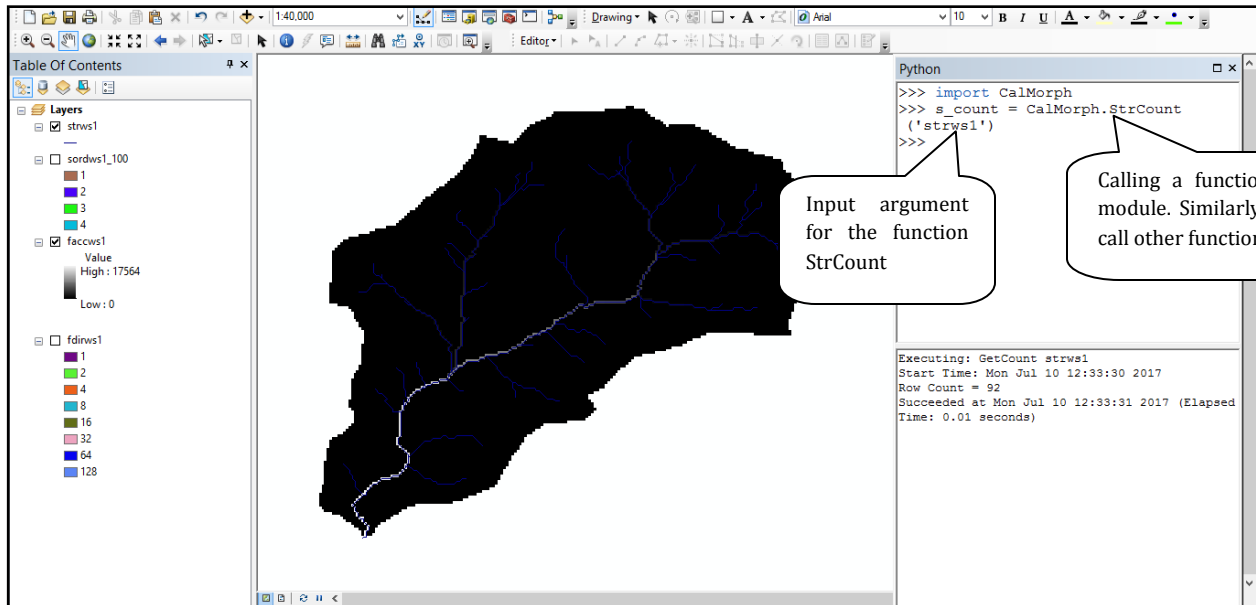
Step 1: Opening the python window inside Arcmap



Step 2: Importing the module CalMorph



Step 3: Implementing the *StrCount* function



The screenshot shows a GIS application window with a map of a watershed area. The map displays a network of streams (blue lines) on a black background. The left sidebar shows a 'Table Of Contents' with layers: 'strws1' (checked), 'sordws1_100', 'facws1' (checked, with a value range of 0 to 17564), and 'fdinws1'. The 'Python' console on the right shows the following code:

```
>>> import CalMorph
>>> s_count = CalMorph.StrCount('strws1')
>>>
```

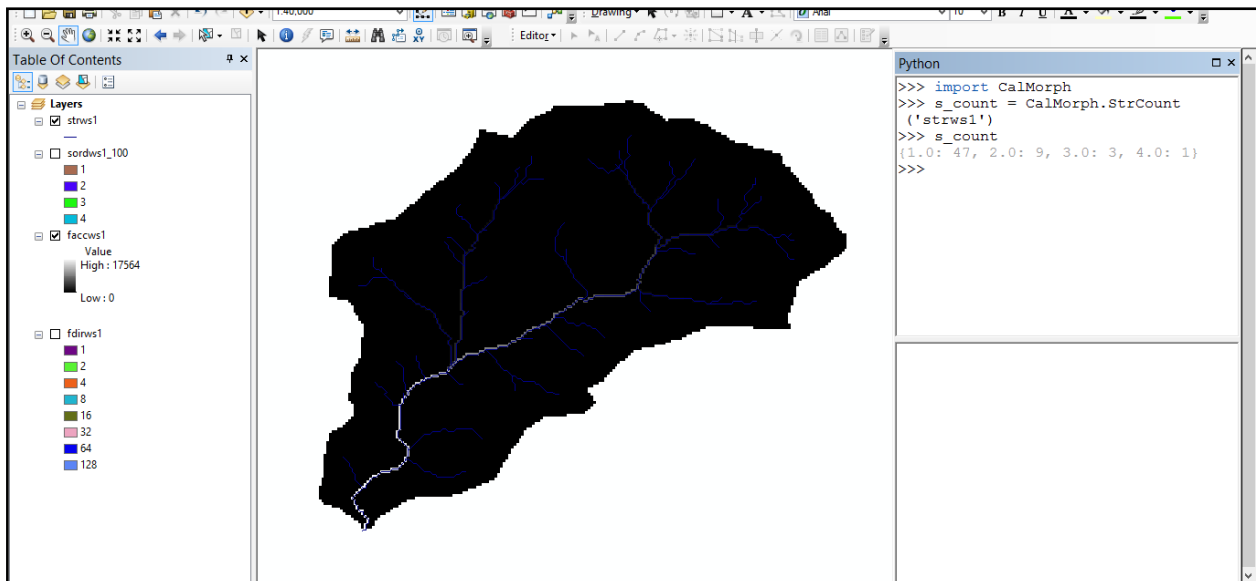
Two callout boxes provide additional context:

- Input argument for the function StrCount
- Calling a function from a module. Similarly user can call other functions also.

Below the code, the console output shows the execution details:

```
Executing: GetCount strws1
Start Time: Mon Jul 10 12:33:30 2017
Row Count = 92
Succeeded at Mon Jul 10 12:33:31 2017 (Elapsed Time: 0.01 seconds)
```

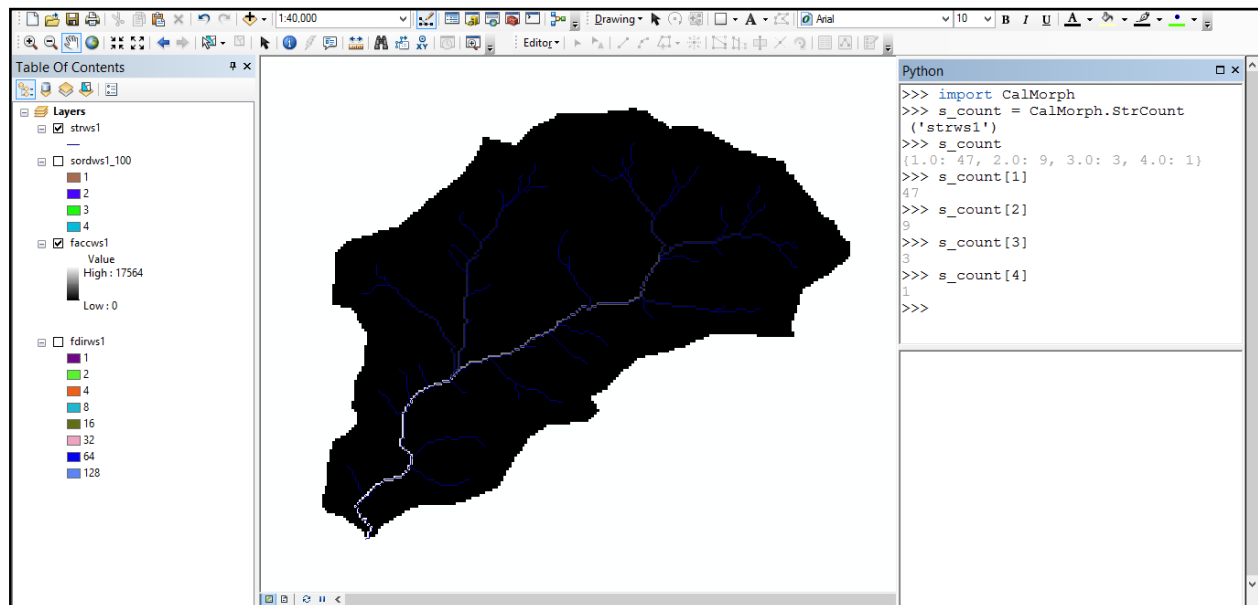
Step 4: In the above example 's_count' is the dictionary (a type of python variable), which the function returns. The dictionary is characterized by a number of keys (which are the strahler orders) and their corresponding items (stream frequency).



The screenshot shows the same GIS application window as in Step 3. The 'Python' console now displays the output of the `StrCount` function:

```
>>> import CalMorph
>>> s_count = CalMorph.StrCount('strws1')
>>> s_count
{1.0: 47, 2.0: 9, 3.0: 3, 4.0: 1}
>>>
```

Step 5: Accessing each item of the dictionary with the help of the keys.



Important: Before using any of the functions, the user is advised to go through the help files for each of the function. That can be achieved by using the default *help* function in python in the following way. The help files contain valuable information which the user has to look into before using the function, like the type of input argument, the projection system of the input argument etc.

