The MATLAB Path

The `path` command displays the search path for functions.

```matlab
>> path
```

The path can also be returned as a char

```matlab
>> p = path; % p will be a char array
```

The path can be set to a given char array

```matlab
>> path(pnew)
```

```matlab
>> path(pnew1,pnew2) % concatenate pnew1,2
```

So, adding something to the current path is easy

```matlab
>> path(path,p_add) % p_add added to "end"
```

```matlab
>> path(p_add,path) % p_add at beginning
```

Private folders/functions

A folder named `private` has special meaning to Matlab. Consider

```
myfunc.m
```
```
utility.m
```
```
helper.m
```
```
special.m
```
```
private
```
```
SomeFolder
```

Although the private folders are not listed on the path `myfunc.m` can call `utility.m` and `helper.m`

`utility.m` and `helper.m` can call `special.m`

`utility.m` cannot call `helper.m`

`myfunc.m` cannot call `special.m`

How Matlab searches for functions/variables

In a function, or at the Matlab prompt (>>)

1. variable in current workspace (`who`, `whos`)
2. visible subfunction (function in same file)
3. visible private function (function in `private` folder of the directory where current function resides)
4. Class methods (methods in class directories)
   The dispatching rules for which method will be called are more involved and have been mentioned. We will cover in more detail next lecture.
5. Functions in current directory
6. Functions in folder listed on the path (top of path has higher precedence)