The CLI Module

Synopsis

This is a (budding) set of tools to help with writing command line and others scripts.

Loading the tools.

This is done with the standard import and load or use statement like

```
cli := j_load('cli')
// OR
j_use('cli')
```

`j_use` dumps it into the current module so you don't need a module name to access it.

The to_stem function

This will take a set of arguments (probably from the command line, but you can pass it whatever list you like) and it will process them into a usable stem. This means separating out the switches and flags and organizing the other arguments in order.

Definitions

switch - an argument to the program prefixed with a marker. The immediate successor to it is its *value*. (e.g. **`-format iso8601`**)

flag - an argument which has no value, but is either present or not (e.g. **`-verbose`**).

Function arguments are

`arg.` - the list of command line arguments. If omitted this defaults to the contents of the arg() function

`marker` - a string that starts a flag or switch

`flags.` - list of flags

Examples

Let us say that we had a script that was invoked with the following:

```
   do_it.qdl my_key.pem -user bob -version 1.2 -v -format iso8601 -in input.txt
output.txt
```

if you issue the args() command you will see the arguments are

```
   args()
[my_key.pem, -user, bob, -version, 1.2, -v, -format, iso8601, -in, input.txt,
output.txt]
```

There is a flag (-v) and what if there is a flag like -use_ssl that, when missing indicates the default is false? Here is what you could do

```
   r. := to_stem(args(), ['-v','-use_ssl'])
   r.
[my_key.pem,output.txt]~{
 -use_ssl : false,
 -version : 1.2,
      -in : input.txt,
    -user : bob,
       -v : true,
  -format : iso8601
}
```

Note that access to these values is quite easy. To get the last argument issue

```
r.(-1)
```

To check if the user wants to use ssl:

```
if[r.'-use_ssl'][…]
```

To check if the user passed in a specific switch:

```
if[has_key('-format', r.)][…];
```

You can even specify special switches

```
to_stem(args(), '-', ['--help','--version']
```

which tells the system to look for those flags first so you can test them for, e.g., printing help or version information.