



Ruby 101

Advanced Ruby: Sub-Processes Etc

Executing Outside Programs:

``command`` -> using backticks (top left corner of the keyboard)
returns the output from standard output
status recorded in \$?

ex

```
my_user_name = `whoami`
```



Executing Outside Programs:

`exec 'command'` -> replaces current process with *command*
ex

```
puts "Ruby Process"  
exec 'whoami'  
puts "This will never get printed out"
```

Ruby Process
username



Executing Outside Programs:

`system 'command'` -> runs *command* in a subshell, waits for command to complete

ex

```
puts "Ruby Process"
system 'whoami'
puts "This will get printed out"
```

Ruby Process

username

This will get printed out



Executing Outside Programs:

```
pid = fork do
  ...
end
```

=> Creates a child process, by forking the current one. Only the calling thread will be accessible to child returns twice (PID in parent; nil in child)

```
Process.wait [pid]
```

=> waits for child processes to finish, allows them to exit; optional pid can be specified to wait for that process

```
waiting_thread = Process.detach pid
```

=> Inform operating system that child processes are no longer watched... allow them to exit

Executing Outside Programs:

```
io = IO.popen command, ['mode']  
IO.popen command, ['mode'] do |io|  
  ...  
end
```

=> Creates IO object connecting a program's standard i/o to the io object

.close => closes io object