



Hello, `pyRevit`.

programming basics

{api}

Application Programming
Interface

{script}

Compiled (C#)

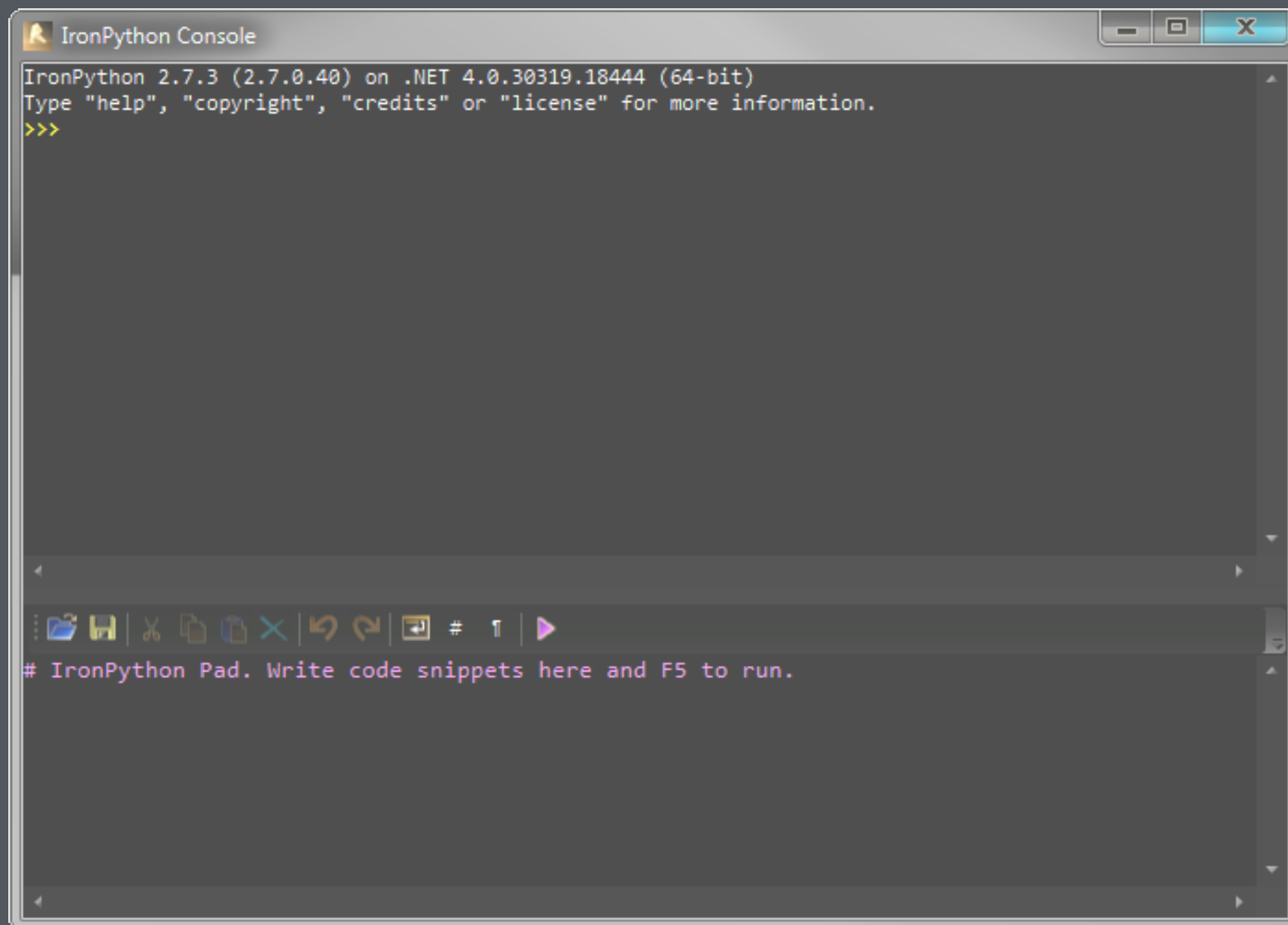
vs

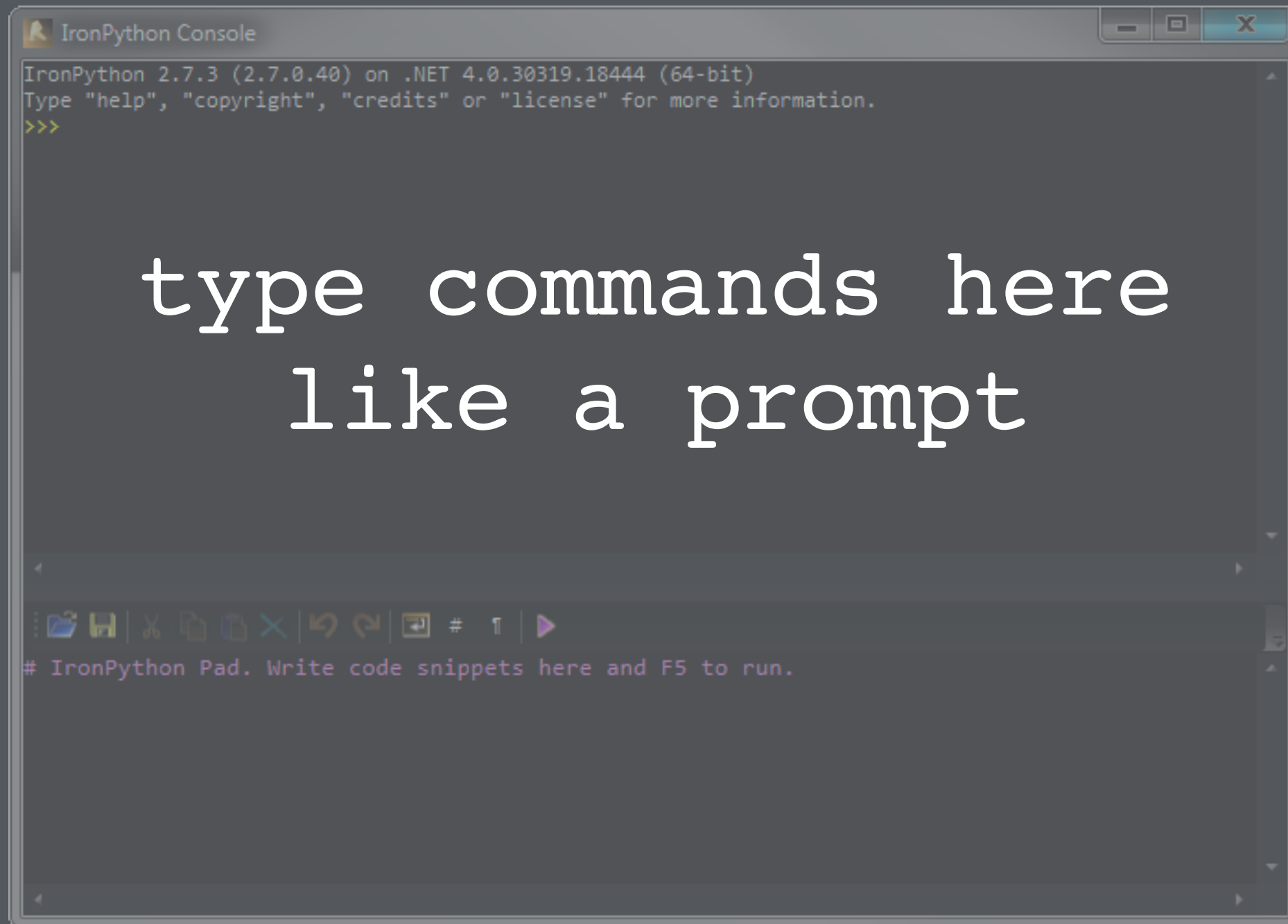
Interpreted (python)

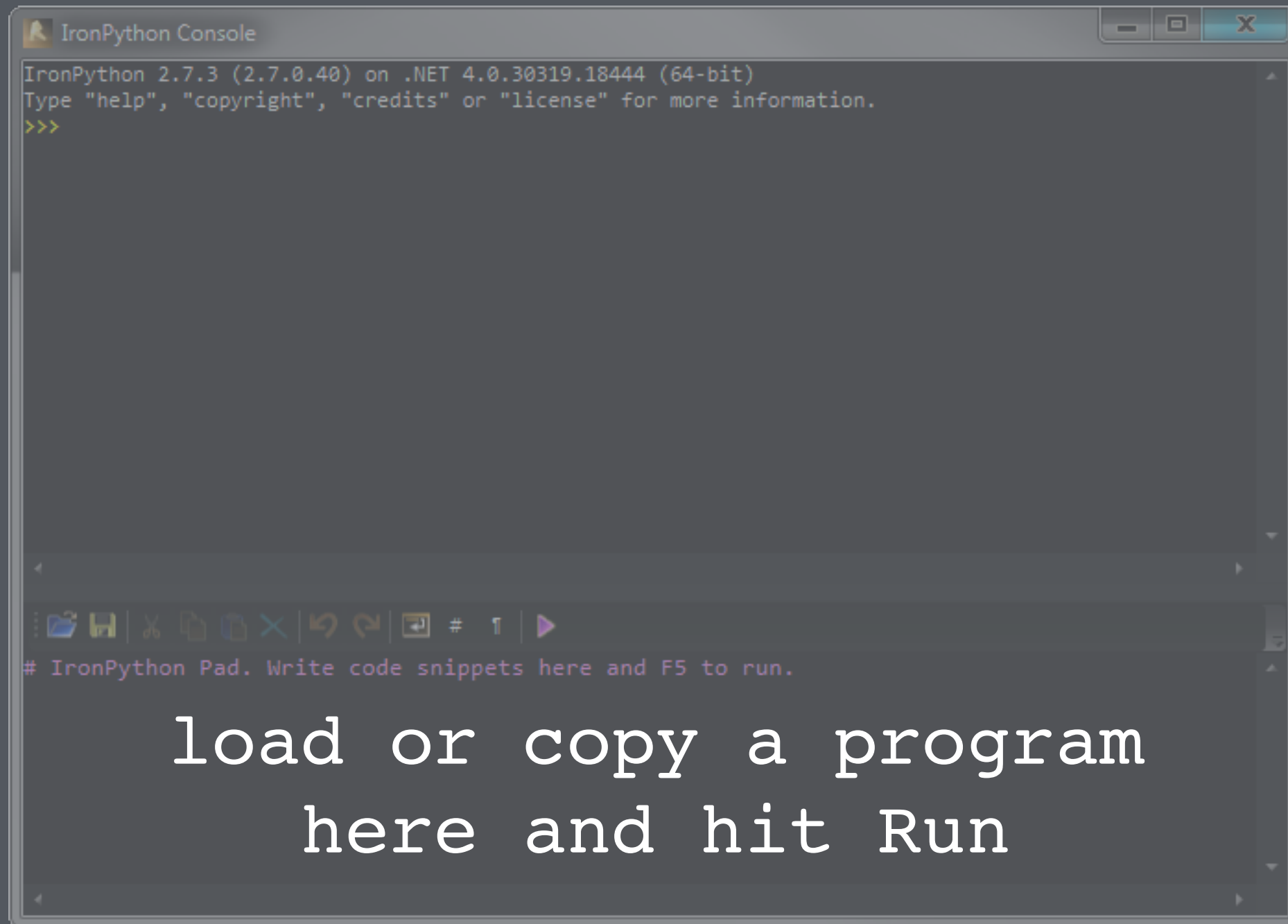
Why python?
(Actually why IronPython?)

{rps}

Revit_Python_Shell









pyRevit

it is an IronPython script
library for Autodesk Revit...



pyRevit



Select_pickAreas.py



Select_pickColumn.py



Select_pickDimensions.py



Select_pickDoors.py



Select_pickFloors.py



Select_pickFraming.py



Select_pickFurniture.py



Select_pickGrids.py



Select_pickModelOnly.py



Select_pickRooms.py



Select_pickTrusses.py



Select_pickViewSpecific.py



Select_pickWalls.py



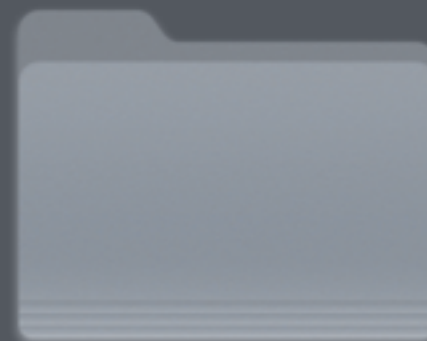
Select_pickWindows.py



Select_selectAllElementsOfSameFamily.py


















`__init__.py`



pyRevit

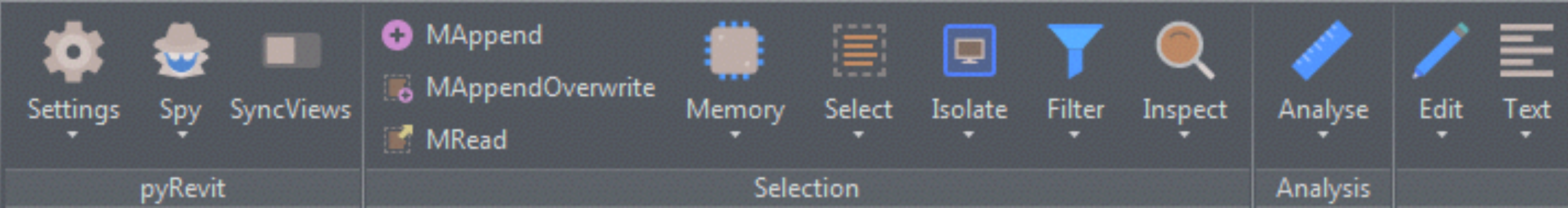
demo

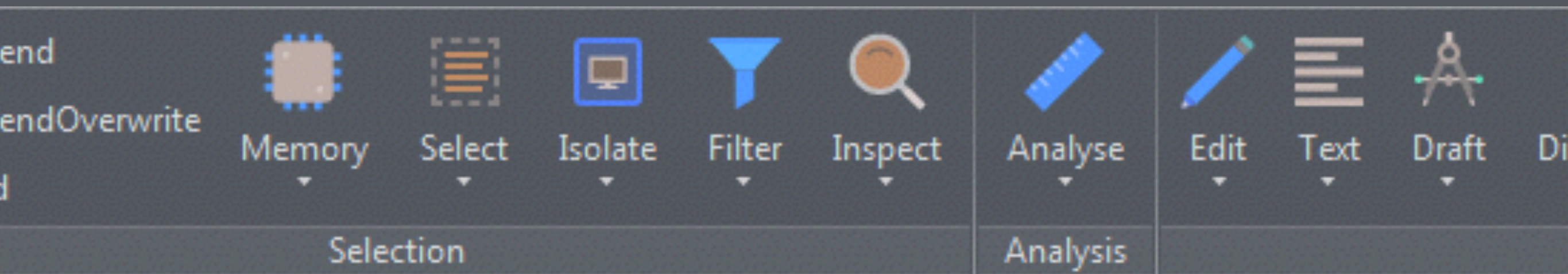
 Settings ▼	 Spy ▼	 SyncViews	 MAppend	 MAppendOverwrite	 MRead	 Memory ▼	 Select ▼	 Isolate ▼	 Filter ▼	 Inspect ▼	 Analyse ▼	 Edit ▼	 Text ▼	 Draft ▼
pyRevit			Selection								Analysis			



1005_Selection_PulldownButton_Memory.png

1005_Selection_PulldownButton_Memory.png





1005_Selection_PulldownButton_Memory.png

1005_Selection_PulldownButton_Memory.png

PushButton

SplitButton

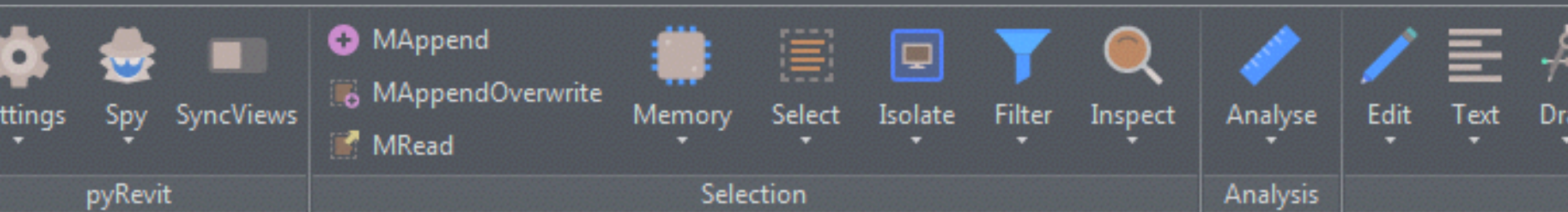
Stack3

1005_Selection_PulldownButton_Memory.png



Memory
▼


Selection




1000_Selection_Stack3_MemA.png
1005_Selection_PulldownButton_Memory.png
1010_Selection_PulldownButton_Select.png
1015_Selection_PulldownButton_Isolate.png
1020_Selection_PulldownButton_Filter.png
1030_Selection_PulldownButton_Inspect.png





Memory


 MClear


 MDeduct


 MPurgeAllMemoryFiles


 MSaveSelection


 copySectionBoxLocation

 copyVisibilityGraphics

 copyZoomState

 pasteSectionBoxLocation

 pasteVisibilityGraphics

 pasteZoomState

ection_PulldownButton_Memory.png

Memory_copySectionBoxLocation.py

Memory_copyVisibilityGraphics.py

Memory_copyZoomState.py

Memory_MClear.py

Memory_MDeduct.py

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•

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Memory_copySectionBoxLocation.py
Memory_copySectionBoxLocation.png



Alternate Installation

{rp1}

Revit_Python_Loader

%pyrevit%

environment variable

%pyrevit% = D:\pyrevit\

%pyrevit% = \\S1\pyrevit\

%temp%

user temp directory

%temp%

pyRevit2016_160614075205.dll

pyRevit2016_160614075205.dll

pyRevit2016_160614075205.dll

pyRevit2016_160614075205.dll

Running on:
2.7.3 ()

Home Directory is: H:\pyRevitMaster\pyRevit
Initializing python script loader...
Asking Revit for RevitPythonLoader Command Loader class...
RPL Assembly found: RevitPythonLoader, Version=2016.0.0.0, Culture=neutral, PublicKeyToken=null
Asking Revit for previously loaded pyRevit assemblies...
Cleaning up old DLL files...
Existing .Dll Removed: pyRevit2016_160614075205.dll
Creating "Reload Scripts" button...
Script found: __init__.py Group: Settings
CommandName: reloadScripts
Reload button added.

Searching for tabs, panels, groups, and scripts...

Searching for scripts under: H:\pyRevitMaster\pyRevit\pyRevit

Searching content folder for script panels ...
Searching content folder for script groups ...
Searching tab folder for scripts...
Script found: Analyse_listLineEndpoints.py Group: Analyse
CommandName: listLineEndpoints
Script found: Analyse_sumAllSelectedEntityAreas.py Group: Analyse
CommandName: sumAllSelectedEntityAreas
Script found: Analyse_sumAllSelectedEntityLengths.py Group: Analyse
CommandName: sumAllSelectedEntityLengths
Script found: Analyse_sumAllSelectedEntityPerimeters.py Group: Analyse
CommandName: sumAllSelectedEntityPerimeters
Script found: Analyse_sumAllSelectedEntityVolumes.py Group: Analyse
CommandName: sumAllSelectedEntityVolumes
Script found: DB_findAllSchemaEntities.py Group: DB
CommandName: findAllSchemaEntities

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Some scripts need to save
temporary files


```
%temp% \ Project1_pySaveSectionBoxState.pym
```



```
%temp%\ Project1_pySaveSectionBoxState.pym  
%temp%\ Project1_pySaveVisibilityGraphicsState.pym  
%temp%\ Project1_pySyncRevitActiveViewZoomState.pym  
%temp%\ syncviewsactive.pys  
%temp%\ syncviewsinactive.pys
```

```
%temp%\ Project1_pySaveSectionBoxState.pym  
%temp%\ Project1_pySaveVisibilityGraphicsState.pym  
%temp%\ Project1_pySyncRevitActiveViewZoomState.pym  
%temp%\ syncviewsactive.pys  
%temp%\ syncviewsinactive.pys
```

* . py *

learn python

thru python website

learn python

thru python website

learn Revit API

thru Revit SDK docs

```
>>> print(ending)  
Happy scripting!
```