

python manim.py code.py Scene --opt

manimlib/config.py

Processing input options (opt)

Processing config

Read from custom_default.yml — file path and part of default config

- module , scene_names
- window_config
- camera_config
- file_writer_config
- ...
- preview

Processing all config and some arguments

manimlib/extract_scene.py main()

Extract all configs related to Scene

- window_config
- camera_config
- ...

If no file is input
Then use BlankScene

If Scene is not specified
Then prompt user for choice

Get Scenes that needs to be rendered

manimlib/scene/Scene.py __init__()

If preview then create Window instance

Create instances of Camera,
SceneFileWriter, Examples
of mouse position points

Set seed for random and np.random

Generate an instance of the Scene
that needs to be rendered



manimlib/_init_.py main()

Call the run() method on the
instantiated Scene

manimlib/scene/scene.py run()

Call the written setup() method

Call the written construct() method

This part is constantly
using Camera to call
OpenGL to obtain each
frame of image, and
instantiate Mobject,
using the play() method
to realize Animation,
etc.

Call tear_down() method

If preview
Keep the window unclosed until you close the
window or interrupt the program

If need to write into video file
Then call SceneFileWriter merge the
generated partial movie files

If needs to be written to a file,
Then call SceneFileWriter to write
each frame in the process of
wait() and play() into the partial
movie files