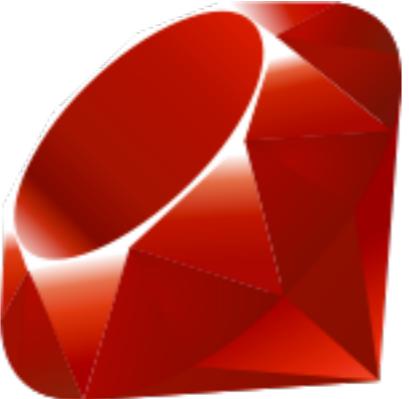
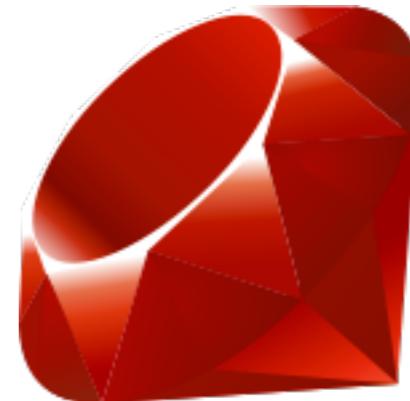
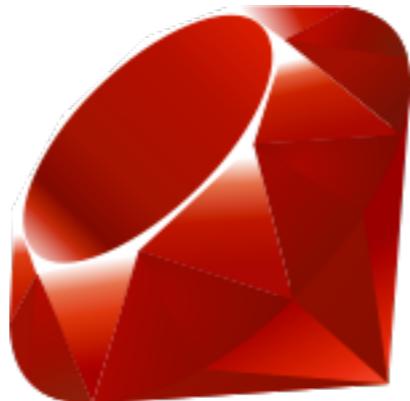
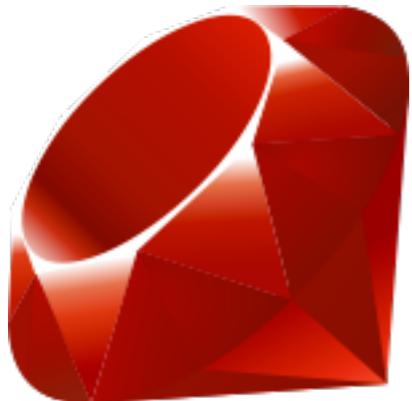


#10

Run  Ruby



Crazy-Insane Fast

# Topaz

- Implementation of the Ruby programming language
- Written in Python
- Uses the RPython VM Toolchain
- Created by core Python developer, Alex Gaynor

#9

# Schedule Events



Issued over 160 million tickets around the world

Powered by  python™ since day 1

Powered by **django** since 2010

Meetup.com also uses Python

# Discover Events

[lanyrd.com](https://lanyrd.com)

Powered by



**django**

## What is Django?

Power Web Apps

Large

and

Small

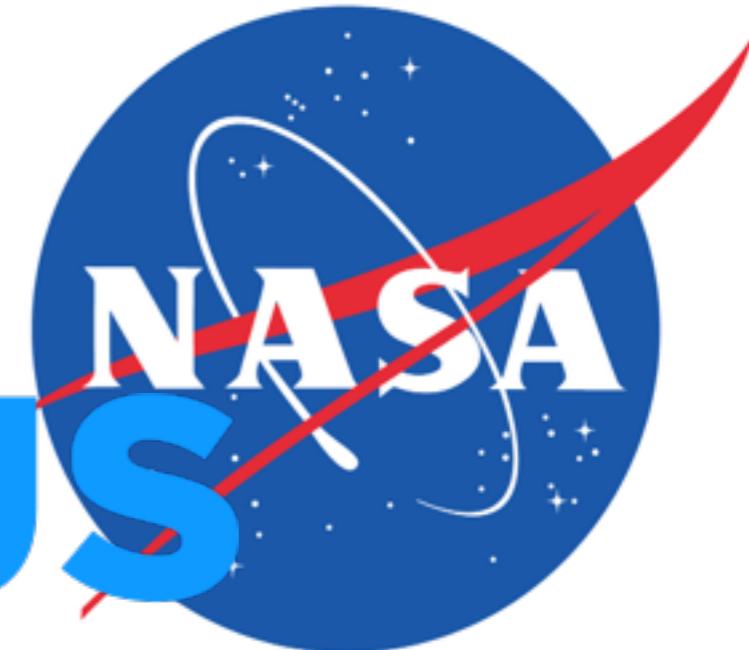
#7

# django



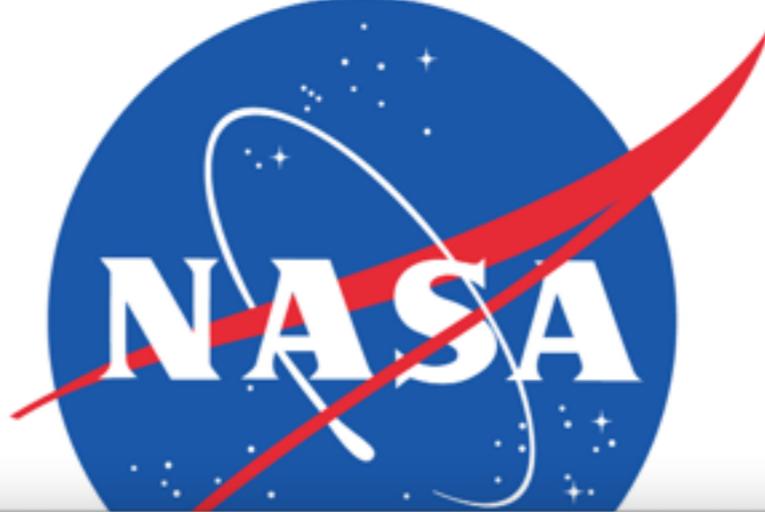
# Pinterest

# rdio DISQUS



#6

# Python at



A screenshot of a web browser showing the NASA Science website ([science.nasa.gov](http://science.nasa.gov)). The browser has multiple tabs open, including "sms messaging", "Meetup (website)", "Find your people", "Eventbrite - Wik", "Eventbrite Emplo", "Eventbrite - Wik", "Django (web fr", and "NASA Science".

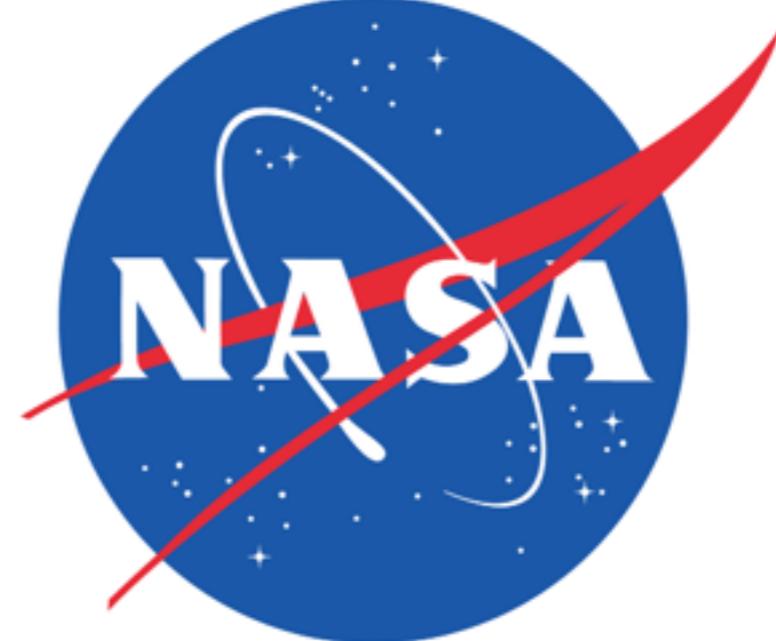
The main content area shows the NASA Science homepage. It features the NASA logo with a red diagonal slash, the text "NATIONAL AERONAUTICS AND SPACE ADMINISTRATION", and a search bar labeled "NASA Science Live Search" with a "GO!" button. Below this is a navigation menu with links to Home, Big Questions, Earth, Heliophysics, Planets, Astrophysics, Missions, Technology, and Science News.

A banner at the top of the page reads "Welcome to NASA SCIENCE ...for the benefit of all." Below the banner are links for the NAC Science Committee, NASA Science for ..., NASA Celebrates ..., and About Us. To the right, there is a "SCIENCE NEWS" section with links to "Colorful Lunar Eclipse", "Jellyfish Flames on the ISS", "Rosetta Comet is Darker than Charcoal", and "Mystery in the Ozone Layer".

On the left, there is a "Earth" section with the subtext "Advancing Earth System Science to meet the challenges of climate and environmental change." It includes links to "Atmospheric Composition" and "Weather". On the right, there is a satellite image of Earth with a caption about sea water off the east coast of Greenland looking like marbled paper in October 2012, with a link to "More info on this image".

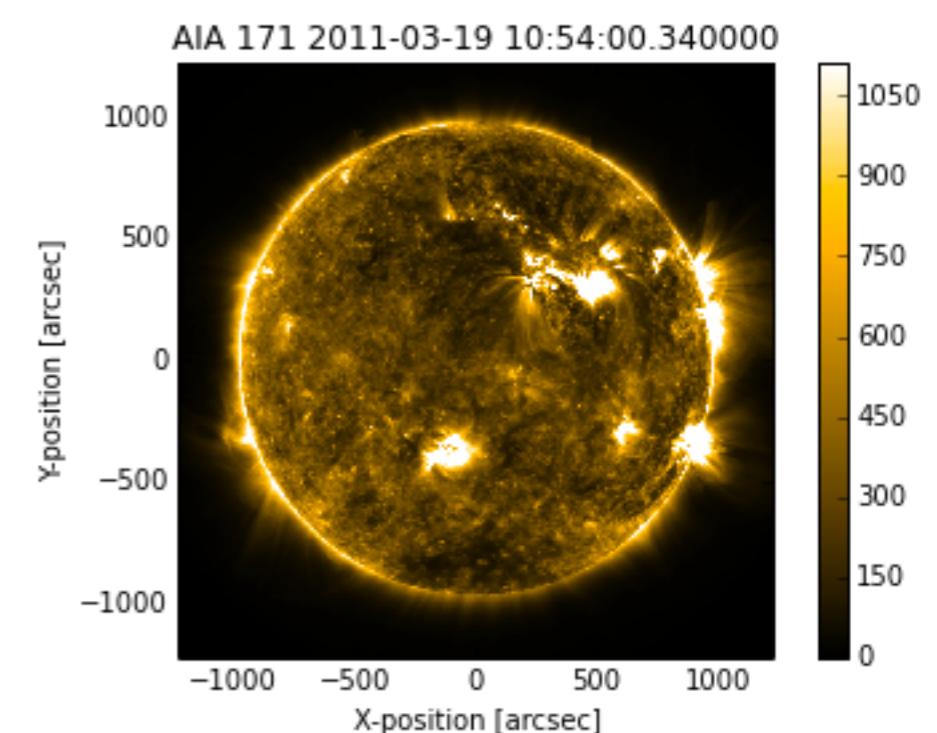
#6

# Python at

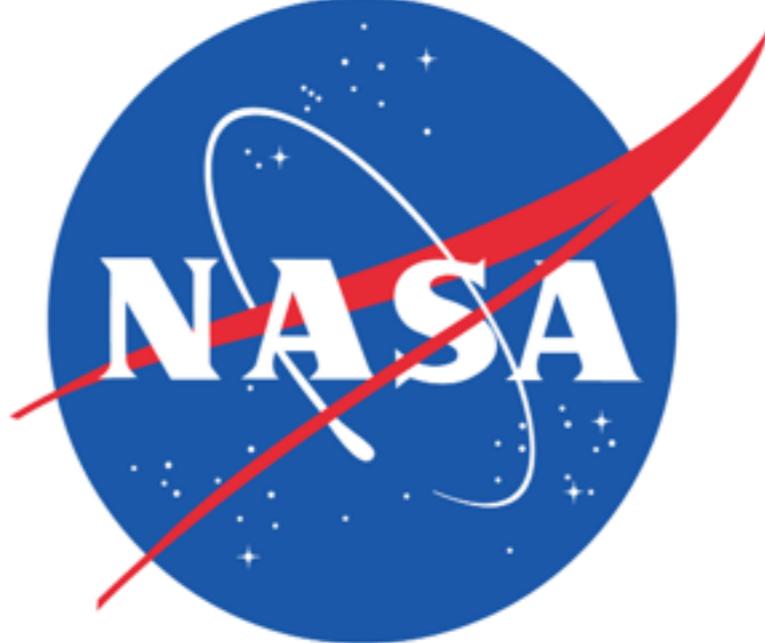


## SunPy

A free and open-source solar data analysis environment for Python.



# Python at



Solve complex problems

- Link programs together
- manage workflow of data

#6



# ASTROPYTHON

## Python for Astronomers

A screenshot of a web browser showing the Astropython website at [www.astropython.org/resources](http://www.astropython.org/resources). The page features the same logo and title as the main site. The navigation bar includes links for HOME, RESOURCES, FORUM, TUTORIALS, SNIPPETS, CONTRIBUTE, ATOM, and ABOUT.

### Resources

Following is a list of Python resources for astronomers. These resources include simple modules, larger packages, full analysis environments, useful documents, and web sites.

Title	Description	Tags
<a href="#">alipy</a>	Convenience script(s) around pyraf/s-extractor to align a stack of dithered FITS images.	<a href="#">astrometry</a> <a href="#">pyraf</a> <a href="#">FITS</a> <a href="#">script</a>
<a href="#">APLpy</a>	Create publication-quality plots of astronomical imaging data	<a href="#">plotting</a> <a href="#">images</a> <a href="#">FITS</a>
<a href="#">asciitable</a>	Extensible ASCII table reader	<a href="#">tables</a> <a href="#">astrolib</a>
<a href="#">astLib</a>	Collection of astronomy-related routines	<a href="#">plotting</a> <a href="#">coordinates</a> <a href="#">statistics</a>
<a href="#">AstroAsciiData</a>	AstroAsciiData is a module to handle ASCII tables	<a href="#">tables</a> <a href="#">astrolib</a>
<a href="#">AstroLib</a>	Astrolib is a software repository for centralizing astronomy community contributed code for Python.	<a href="#">astrolib</a> <a href="#">repository</a>
<a href="#">astroML</a>	Machine learning and data mining	<a href="#">machine learning</a> <a href="#">data mining</a> <a href="#">numpy</a> <a href="#">scipy</a> <a href="#">matplotlib</a>
<a href="#">AstroPy</a>	mailing list for astronomers using python	<a href="#">news</a> <a href="#">scipy</a> <a href="#">questions</a>
<a href="#">astropy</a>	Community Python library for astronomy	<a href="#">astrometry</a> <a href="#">coordinates</a> <a href="#">cosmology</a> <a href="#">datetime</a> <a href="#">FITS</a> <a href="#">image</a> <a href="#">photometry</a> <a href="#">PyFITS</a> <a href="#">spectra</a> <a href="#">tables</a> <a href="#">time</a> <a href="#">vo</a> <a href="#">writable</a> <a href="#">WCS</a>
<a href="#">astrophysics</a>	Astrophysics utilities for python	<a href="#">images</a> <a href="#">spectra</a> <a href="#">tables</a> <a href="#">photometry</a> <a href="#">packages</a> <a href="#">astrometry</a>

### Tags

advocacy answers astrolib  
 astrometry astropy books  
 cluster collection context  
 coordinates cosmology cython  
 data mining database datetime  
 debug distributed ds9 efficiency  
 environment FITS fitting fortran  
 gui HPC idl image images  
 IPAC ipython IRAF jython  
 machine learning matplotlib  
 meetings miriad modeling  
 module MPI new news  
 notebook numpy packages  
 photometry plotting pycon 2011  
 pycon2011 PyFITS pyraf python  
 python3 question questions R  
 radio radio astronomy repository  
 resources scipy script SED  
 SEDs sherpa solar spectra  
 SQL statistics tables telescope  
 test time timing tutorial vo  
 votable WCS workshops X-ray  
 xml

### Featured resources

- [Python for Astronomers - Practical intro](#)
- [Getting Started - Python in astronomy](#)

#5

# Social Images



Handles HUGE volumes and **sold** for oodles of cash

#5

# Social Images



Handles HUGE volumes and **makes** oodles of cash

#4

# Spreadsheets

The screenshot shows a Google Sheets spreadsheet titled "Really important data". The spreadsheet has a green header bar with the title and a "Comments" button. The toolbar includes standard options like File, Edit, View, Insert, Format, Data, Tools, Add-ons, Help, and a "Share" button. The formula bar shows "30 seconds". The main table has columns A through G. Row 1 contains headers: Name, # of teeth, wings, Unassisted flight?, and Underwater endurance. Rows 2 through 5 contain data for Danny, Audrey, Shark, and Duck respectively. The "Underwater endurance" column for the Duck row is currently active, showing "30 seconds". The bottom navigation bar shows "Sheet1" and a checkmark icon.

	A	B	C	D	E	F	G
1	Name	# of teeth	wings	Unassisted flight?	Underwater endurance		
2	Danny		32	0 no	60 seconds		
3	Audrey		32	0 no	90 seconds		
4	Shark		3000	0 no	infinite		
5	Duck		0	2 yes	30 seconds		
6							
7							
8							
9							
10							
11							
12							
13							

# Spreadsheets

```
import csv

with open("export.csv") as f:
    for row in csv.DictReader(f):
        print(row['name'])
        print(row['teeth'])
```

# Big Data

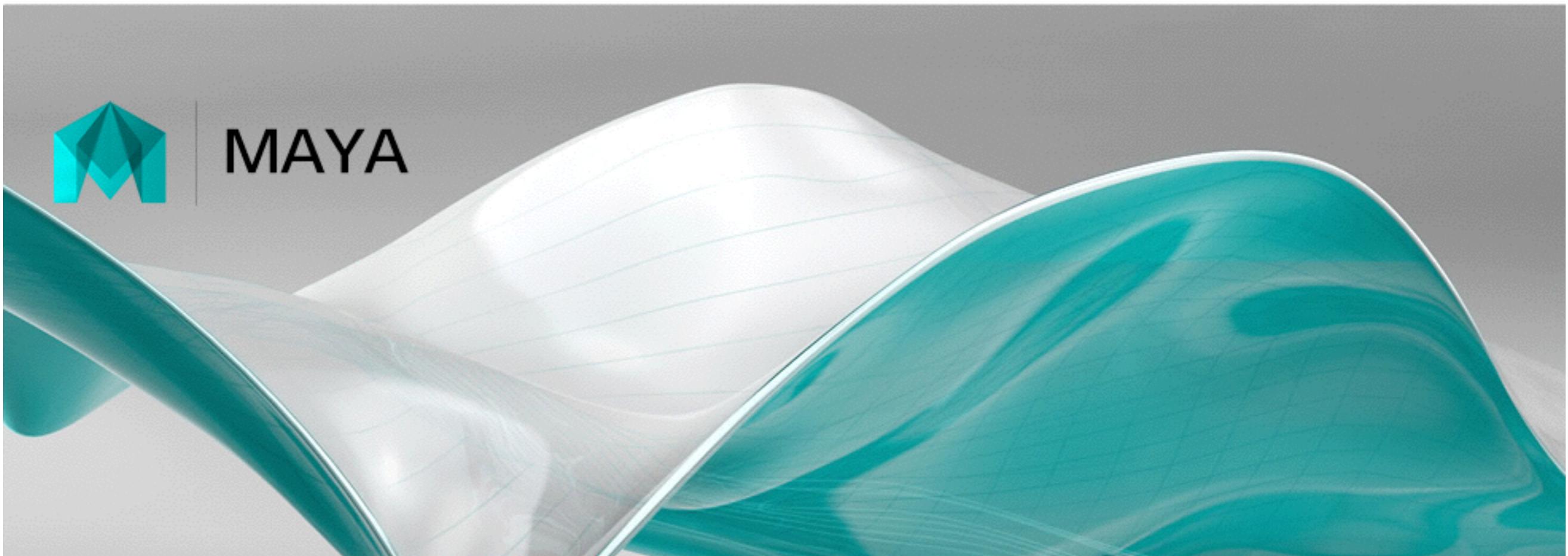
The same core libraries that do heavy lifting for scientists

- NumPy
- SciPy
- Pandas

Work great when it comes to Big Data projects

#2

# Makes Movies



#2

# Make Movies



# Write Books!

