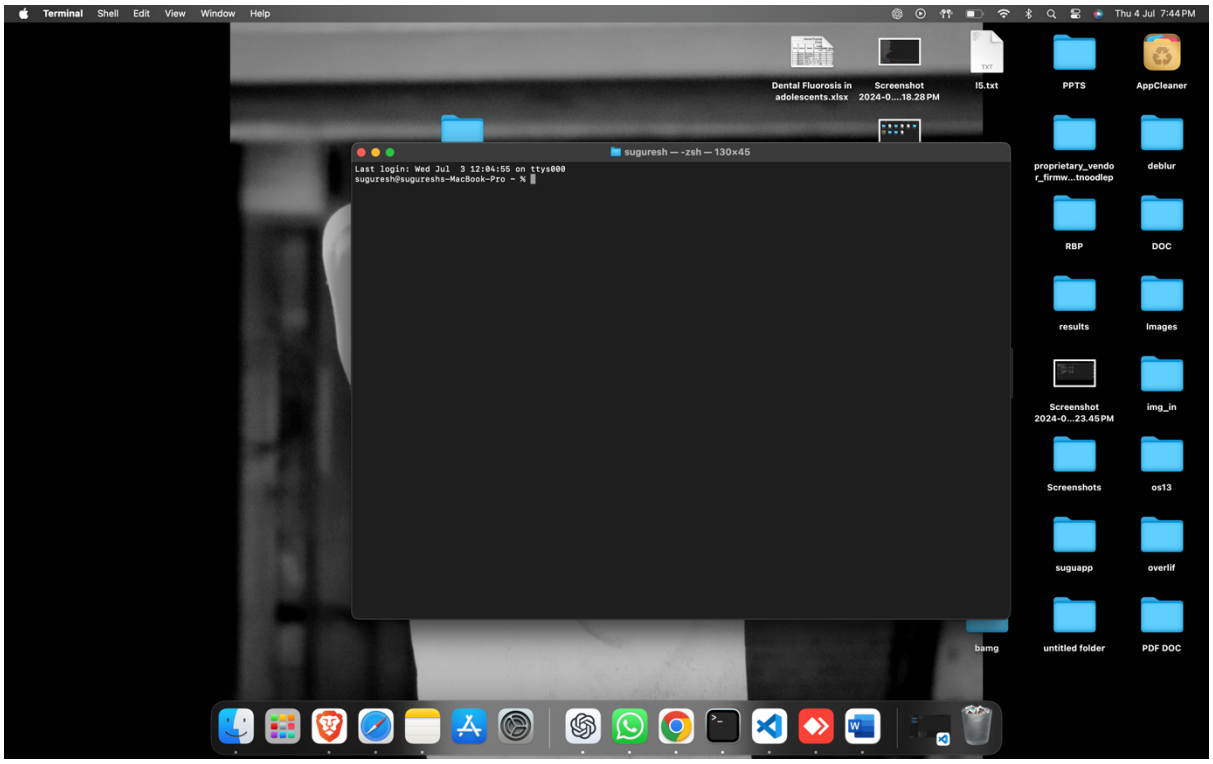
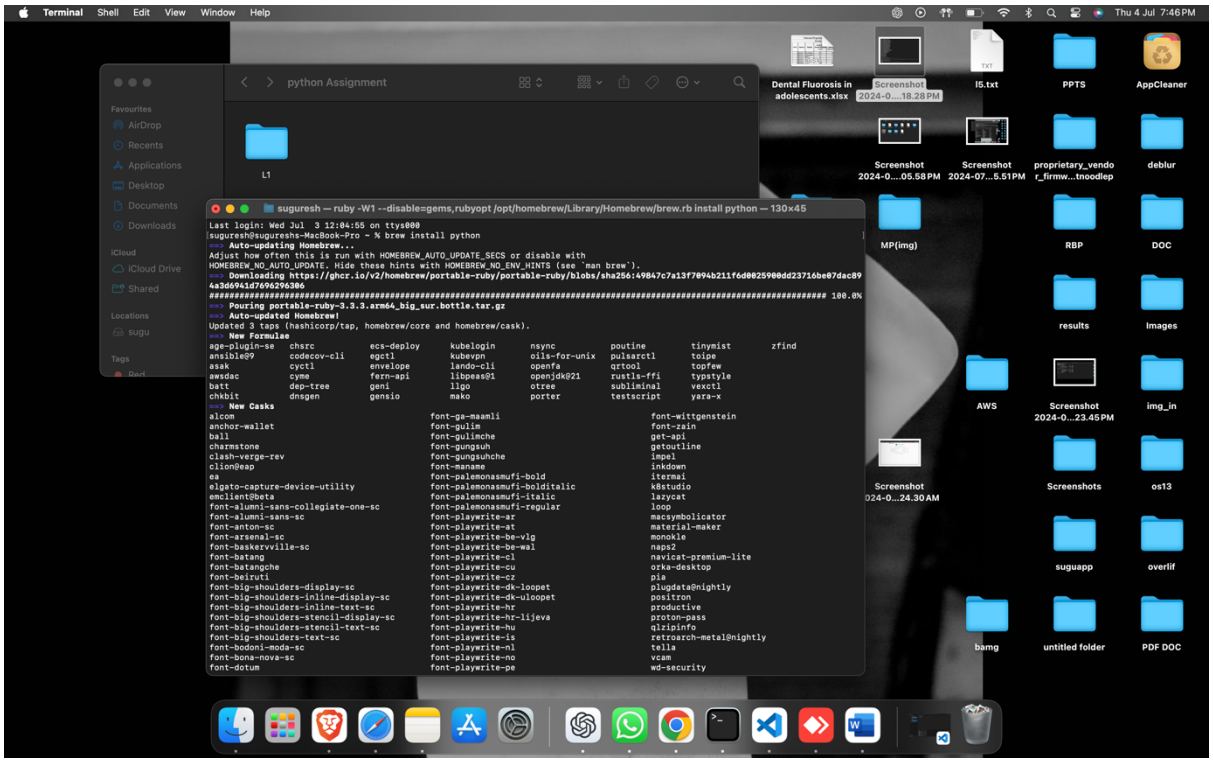
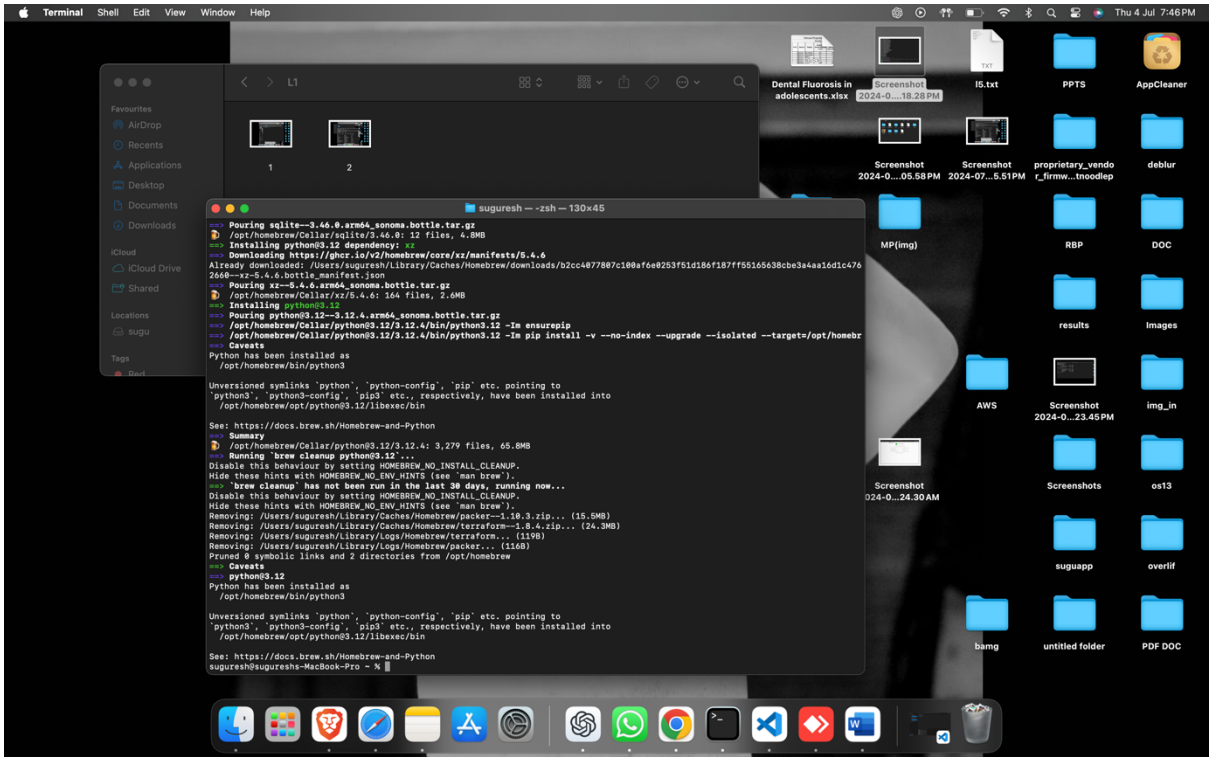
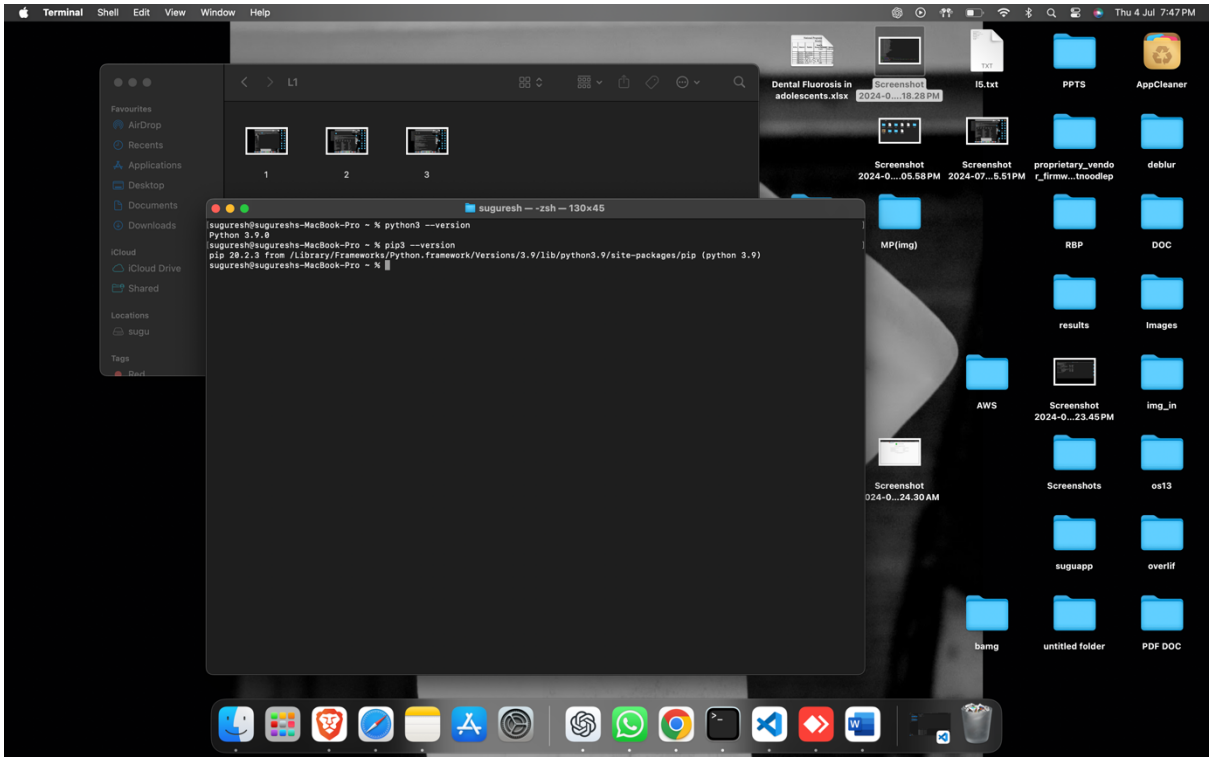
Python Assignment

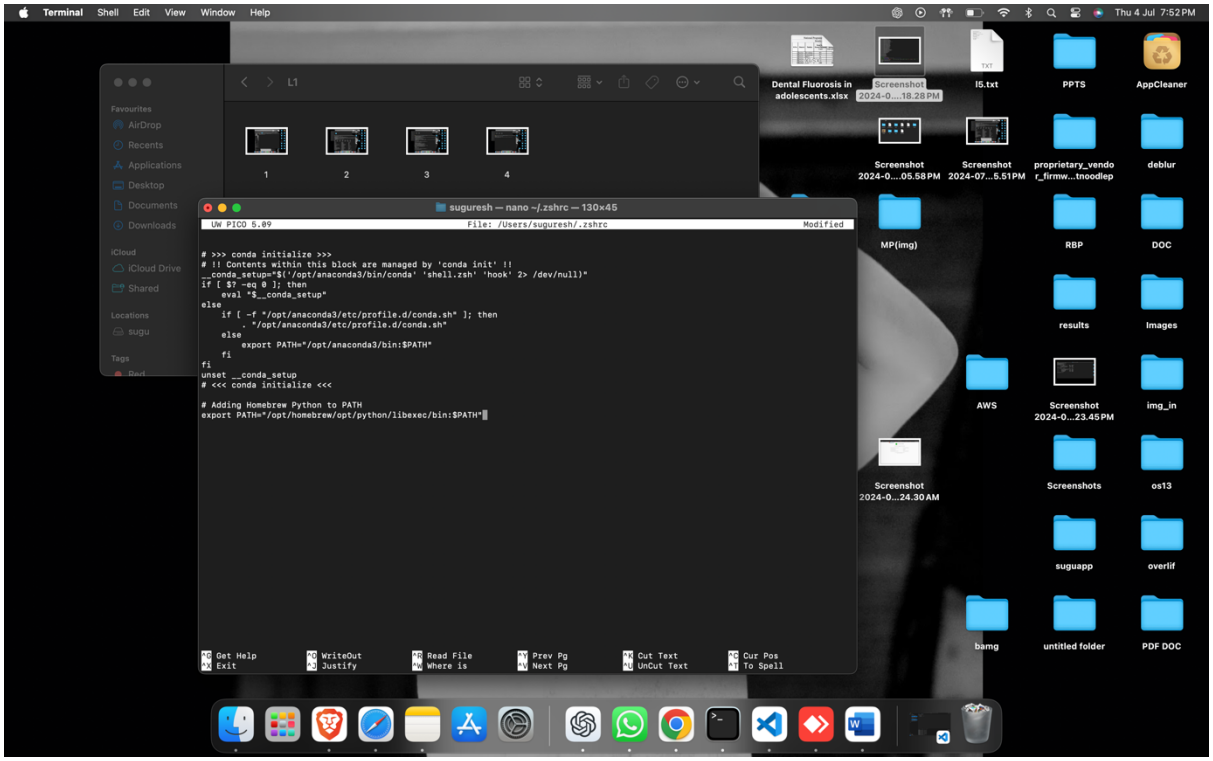
L1 - Install and Setup Environment Variable for Python

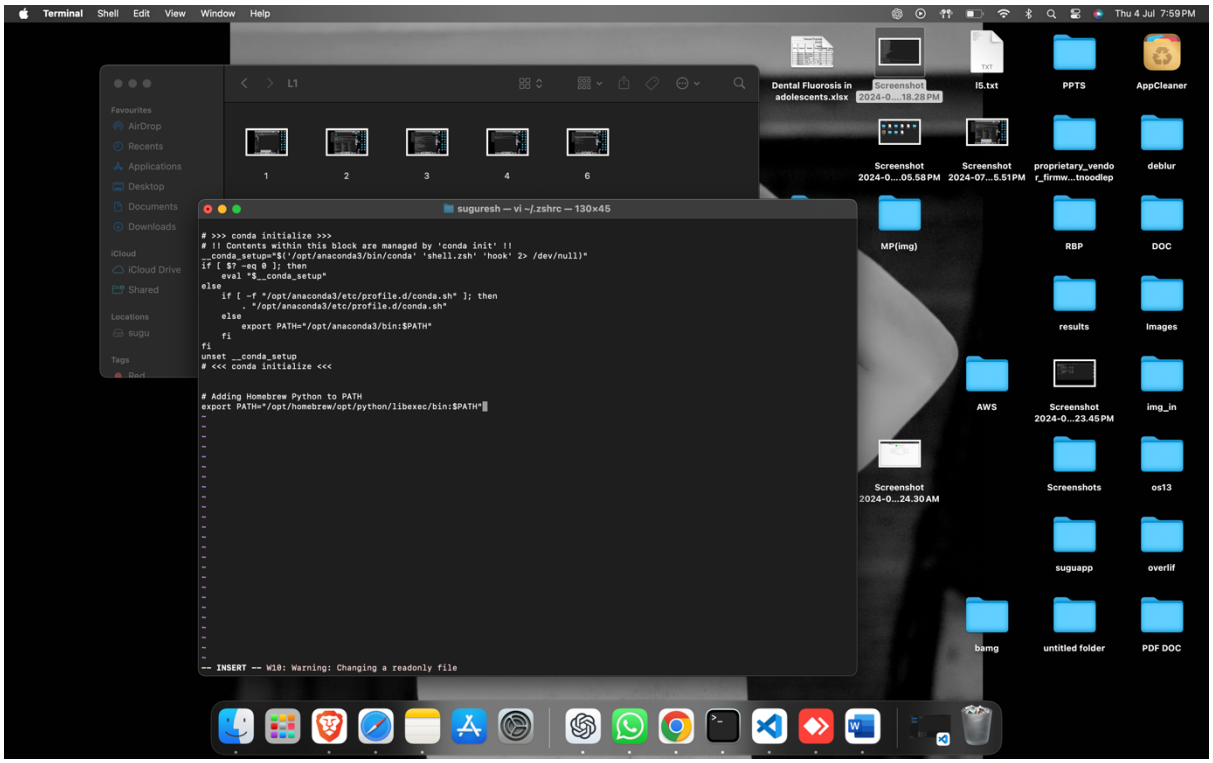




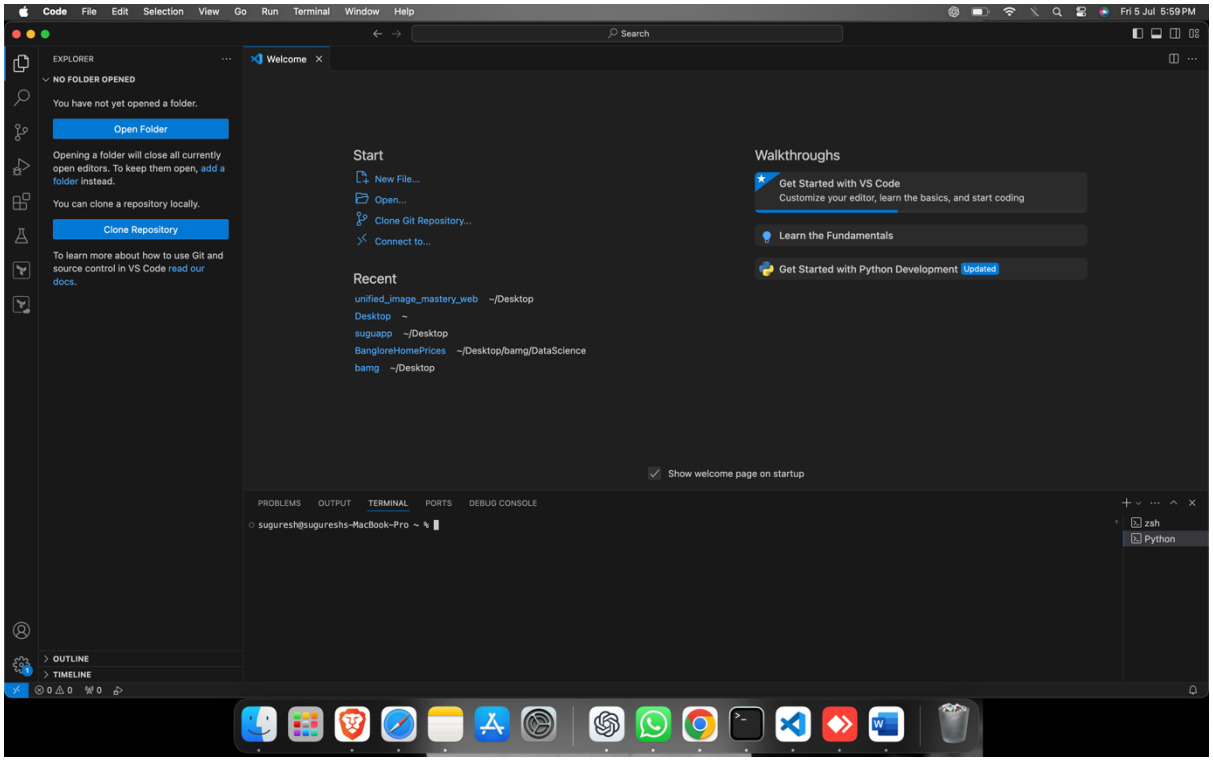

Terminal Shell Edit View Window Help
Thu 4 Jul 7:46 PM
suguresh — -zsh — 130×45
==> Pouring sqlite--3.46.0.arm64_sonoma.bottle.tar.gz
/opt/homebrew/Cellar/sqlite/3.46.0: 12 files, 4.8MB
==> Installing python@3.12 dependency: xz
==> Downloading https://ghcr.io/v2/homebrew/core/xz/manifests/5.4.6
Already downloaded: /Users/suguresh/Library/Caches/Homebrew/downloads/b2cc4077807c100af6e0253f51d186f187ff55165638cbe3a4aa16d1c4762660--xz-5.4.6.bottle_manifest.json
==> Pouring xz--5.4.6.arm64_sonoma.bottle.tar.gz
/opt/homebrew/Cellar/xz/5.4.6: 164 files, 2.6MB
==> Installing python@3.12
==> Pouring python@3.12--3.12.4.arm64_sonoma.bottle.tar.gz
==> /opt/homebrew/Cellar/python@3.12/3.12.4/bin/python3.12 -Im ensurepip
==> /opt/homebrew/Cellar/python@3.12/3.12.4/bin/python3.12 -Im pip install -v --no-index --upgrade --isolated --target=/opt/homebr
==> Caveats
Python has been installed as
/opt/homebrew/bin/python3
Unversioned symlinks `python`, `python-config`, `pip` etc. pointing to
`python3`, `python3-config`, `pip3` etc., respectively, have been installed into
/opt/homebrew/opt/python@3.12/libexec/bin
See: https://docs.brew.sh/Homebrew-and-Python
==> Summary
/opt/homebrew/Cellar/python@3.12/3.12.4: 3,279 files, 65.8MB
==> Running `brew cleanup python@3.12`...
Disable this behaviour by setting HOMEBREW_NO_INSTALL_CLEANUP.
Hide these hints with HOMEBREW_NO_ENV_HINTS (see `man brew`).
==> `brew cleanup` has not been run in the last 30 days, running now...
Disable this behaviour by setting HOMEBREW_NO_INSTALL_CLEANUP.
Hide these hints with HOMEBREW_NO_ENV_HINTS (see `man brew`).
Removing: /Users/suguresh/Library/Caches/Homebrew/packer--1.10.3.zip... (15.5MB)
Removing: /Users/suguresh/Library/Caches/Homebrew/terraform--1.8.4.zip... (24.3MB)
Removing: /Users/suguresh/Library/Logs/Homebrew/terraform... (119B)
Removing: /Users/suguresh/Library/Logs/Homebrew/packer... (116B)
Pruned 0 symbolic links and 2 directories from /opt/homebrew
==> Caveats
==> python@3.12
Python has been installed as
/opt/homebrew/bin/python3
Unversioned symlinks `python`, `python-config`, `pip` etc. pointing to
`python3`, `python3-config`, `pip3` etc., respectively, have been installed into
/opt/homebrew/opt/python@3.12/libexec/bin
See: https://docs.brew.sh/Homebrew-and-Python
suguresh@sugureshs-MacBook-Pro ~ %
Dental Fluorosis in adolescents.xlsx
Screenshot 2024-0....18.28 PM
I5.txt
PPTS
AppCleaner
Screenshot 2024-0....05.58 PM
Screenshot 2024-07...5.51 PM
proprietary_vendor_firmw...tnoodlep
deblur
MP(img)
RBP
DOC
results
Images
AWS
Screenshot 2024-0...23.45 PM
img_in
Screenshot 024-0...24.30 AM
Screenshots
os13
suguapp
overlif
bamg
untitled folder
PDF DOC

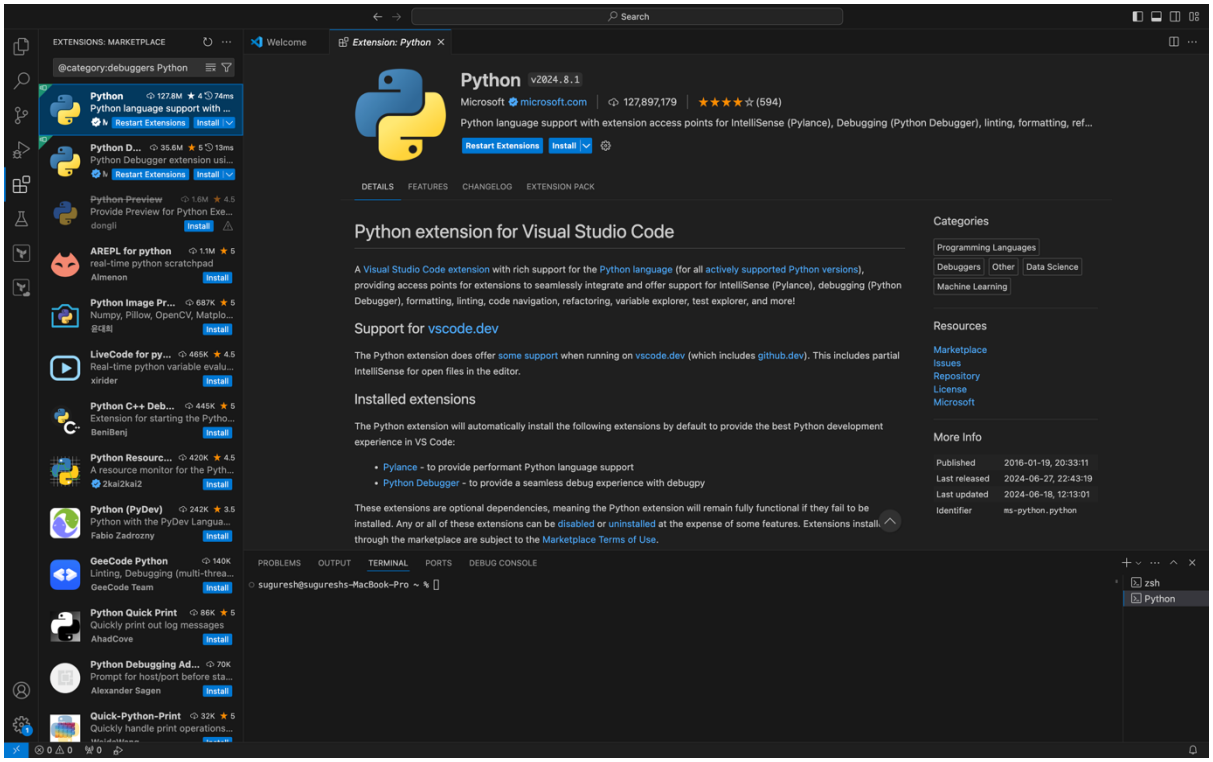

Terminal Shell Edit View Window Help
Thu 4 Jul 7:47 PM
suguresh — -zsh — 130×45
suguresh@sugureshs-MacBook-Pro ~ % python3 --version
Python 3.9.0
suguresh@sugureshs-MacBook-Pro ~ % pip3 --version
pip 20.2.3 from /Library/Frameworks/Python.framework/Versions/3.9/lib/python3.9/site-packages/pip (python 3.9)
suguresh@sugureshs-MacBook-Pro ~ %
Dental Fluorosis in adolescents.xlsx
Screenshot 2024-0....18.28 PM
I5.txt
PPTS
AppCleaner
Screenshot 2024-0....05.58 PM
Screenshot 2024-07...5.51 PM
proprietary_vendor_firmw...tnoodlep
deblur
MP(img)
RBP
DOC
results
Images
AWS
Screenshot 2024-0...23.45 PM
img_in
Screenshot 024-0...24.30 AM
Screenshots
os13
suguapp
overlif
bamg
untitled folder
PDF DOC

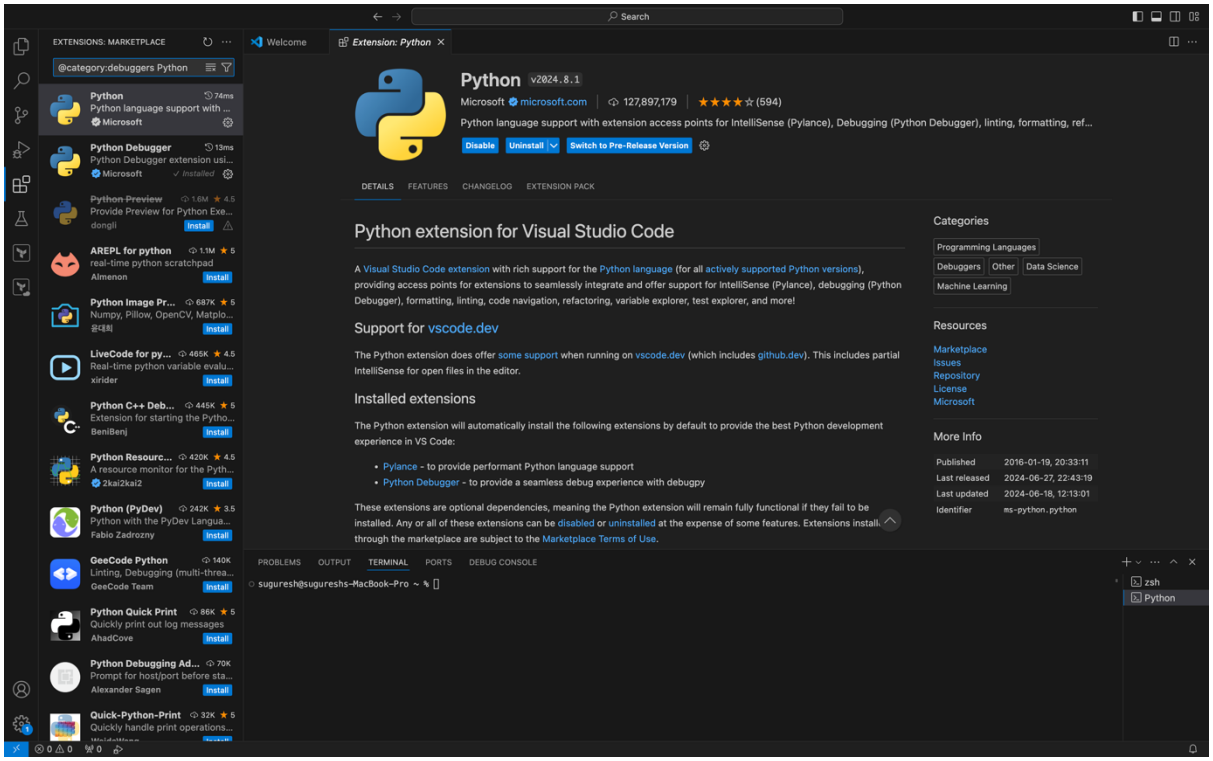

Terminal Shell Edit View Window Help
Thu 4 Jul 7:52 PM
suguresh — nano ~/.zshrc — 130×45
UW PICO 5.09 File: /Users/suguresh/.zshrc Modified
# >>> conda initialize >>>
# !! Contents within this block are managed by 'conda init' !!
__conda_setup="$('/opt/anaconda3/bin/conda' 'shell.zsh' 'hook' 2> /dev/null)"
if [$? -eq 0]; then
eval "$__conda_setup"
else
if [-f "/opt/anaconda3/etc/profile.d/conda.sh"]; then
. "/opt/anaconda3/etc/profile.d/conda.sh"
else
export PATH="/opt/anaconda3/bin:$PATH"
fi
fi
unset __conda_setup
<<< conda initialize <<<
Adding Homebrew Python to PATH
export PATH="/opt/homebrew/opt/python/libexec/bin:$PATH"
^G Get Help ^O WriteOut ^R Read File ^Y Prev Pg ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where is ^V Next Pg ^U UnCut Text ^T To Spell
Dental Fluorosis in adolescents.xlsx
I5.txt
PPTS
AppCleaner
proprietary_vendor_firmw...tnoodlep
deblur
MP(img)
RBP
DOC
results
Images
AWS
img_in
Screenshots
os13
suguapp
overlif
bamg
untitled folder
PDF DOC

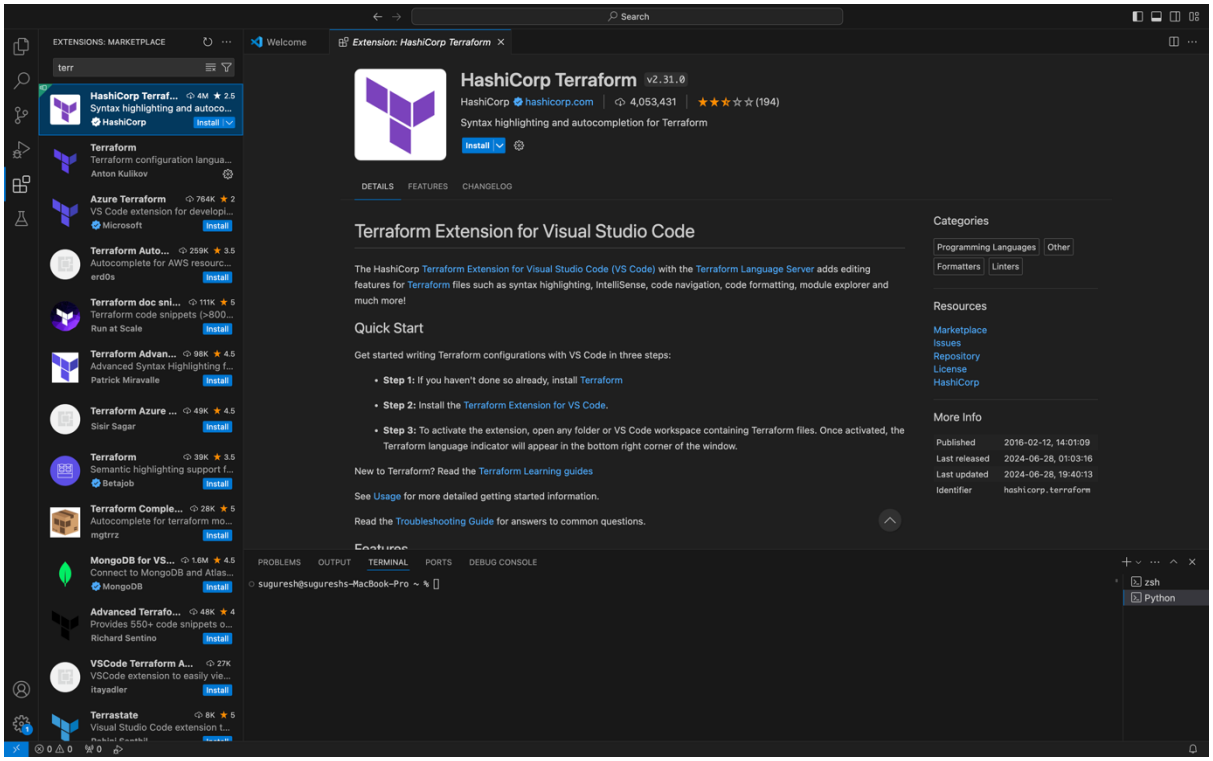

Terminal Shell Edit View Window Help
Thu 4 Jul 7:59 PM
suguresh — vi ~/.zshrc — 130×45
# >>> conda initialize >>>
# !! Contents within this block are managed by 'conda init' !!
__conda_setup="$('/opt/anaconda3/bin/conda' 'shell.zsh' 'hook' 2> /dev/null)"
if [$? -eq 0]; then
eval "$__conda_setup"
else
if [-f "/opt/anaconda3/etc/profile.d/conda.sh"]; then
. "/opt/anaconda3/etc/profile.d/conda.sh"
else
export PATH="/opt/anaconda3/bin:$PATH"
fi
fi
unset __conda_setup
<<< conda initialize <<<
Adding Homebrew Python to PATH
export PATH="/opt/homebrew/opt/python/libexec/bin:$PATH"
-- INSERT -- W10: Warning: Changing a readonly file
Dental Fluorosis in adolescents.xlsx
I5.txt
PPTS
AppCleaner
proprietary_vendor_firmw...tnoodlep
deblur
MP(img)
RBP
DOC
results
Images
AWS
img_in
Screenshots
os13
suguapp
overlif
bamg
untitled folder
PDF DOC

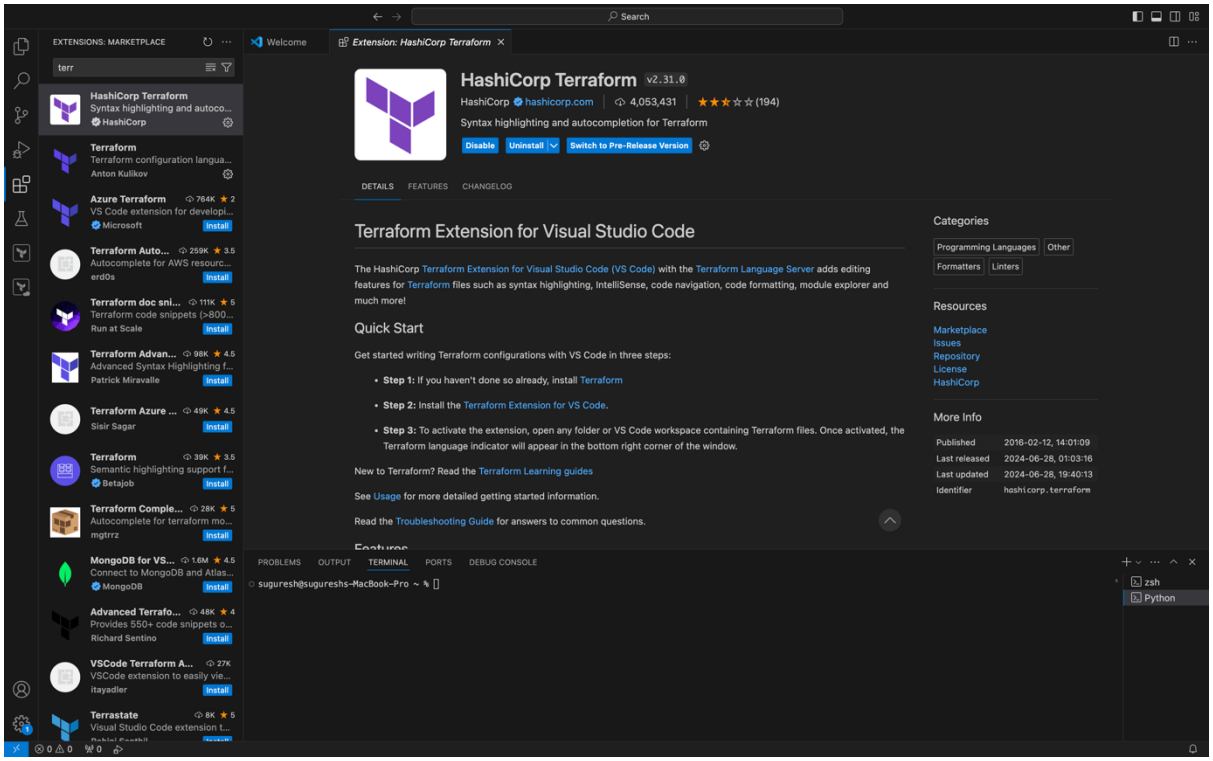
2. L2 - Install Visual Studio Code and Install Python and Terraform Extensions in VS Code



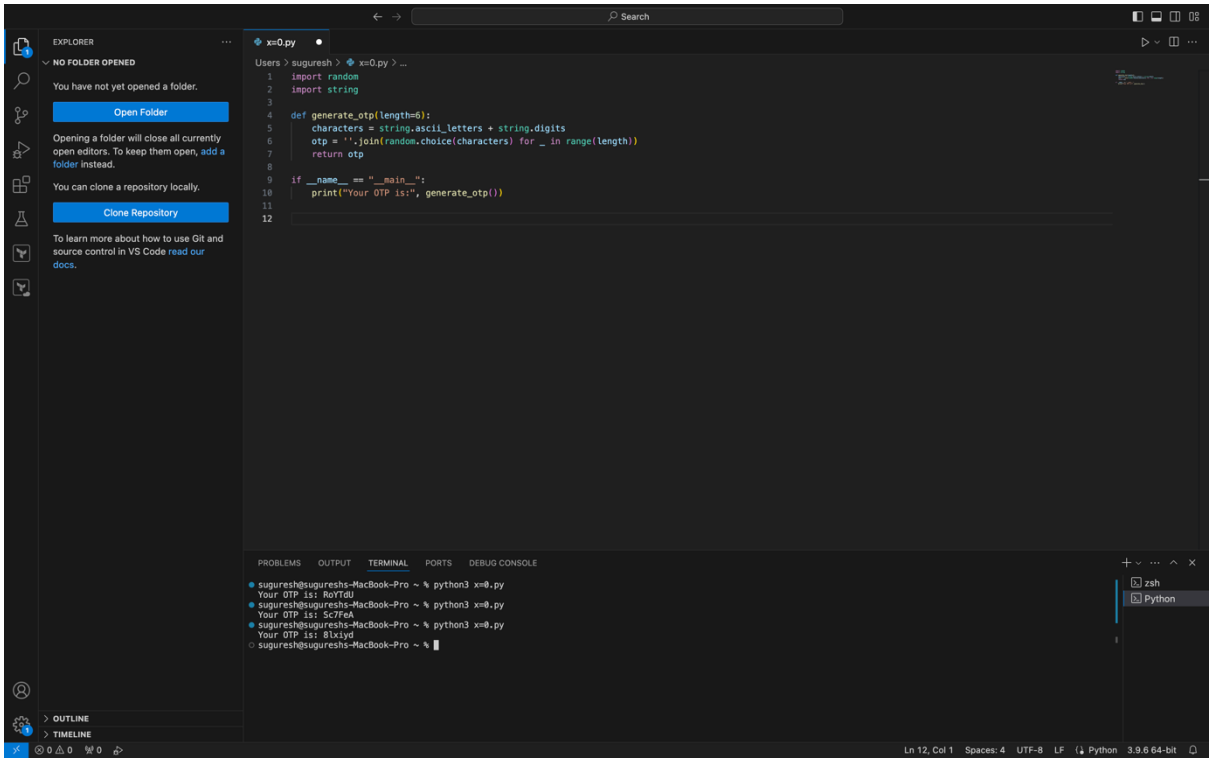


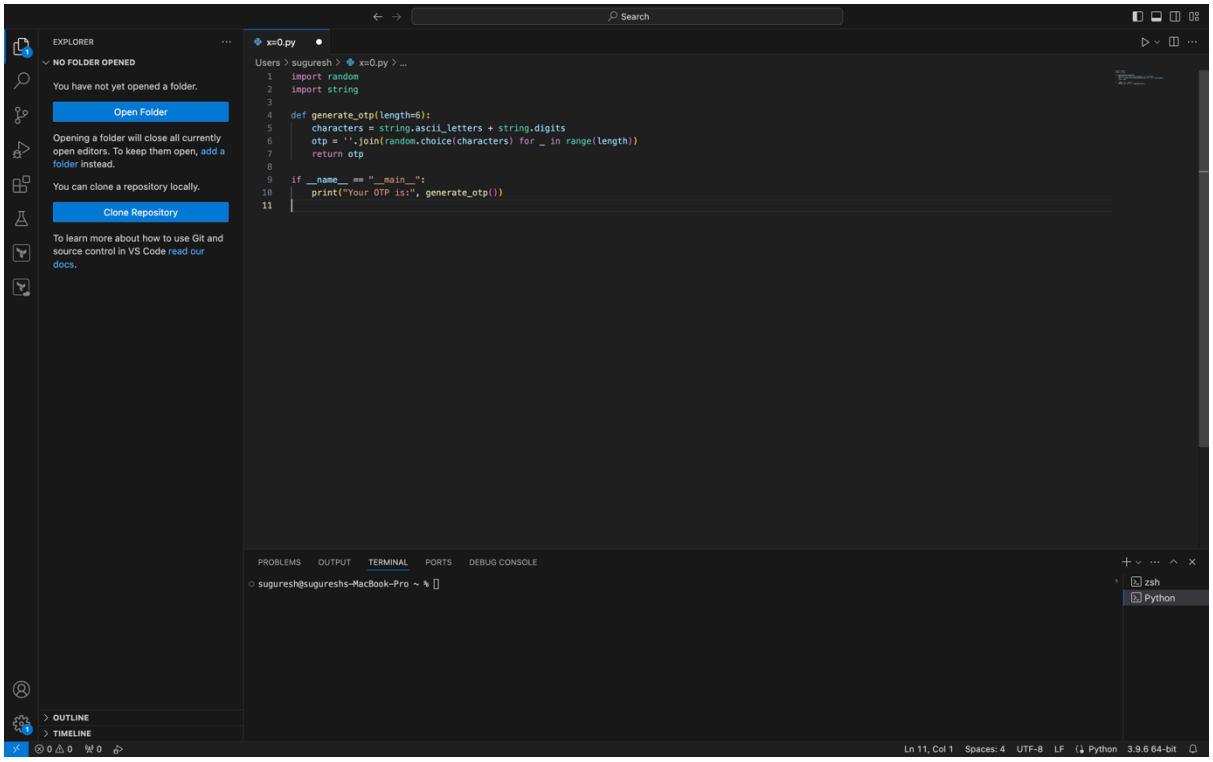

EXTENSIONS: MARKETPLACE
@category:debuggers Python
Python
Python language support with ...
Microsoft
Python Debugger
Python Debugger extension usi...
Microsoft
Python Preview
Provide Preview for Python Exe...
dongli
AREPL for python
real-time python scratchpad
Almenon
Python Image Pr...
Numpy, Pillow, OpenCV, Matplo...
LiveCode for py...
Real-time python variable evalu...
xirider
Python C++ Deb...
Extension for starting the Pytho...
BenBenj
Python Resourc...
A resource monitor for the Pyth...
2kai2kai2
Python (PyDev)
Python with the PyDev Langua...
Fabio Zadrozny
GeeCode Python
Linting, Debugging (multi-threa...
GeeCode Team
Python Quick Print
Quickly print out log messages
AhadCove
Python Debugging Ad...
Prompt for host/port before sta...
Alexander Sagen
Quick-Python-Print
Quickly handle print operations...
Welcome
Extension: Python
Python
v2024.8.1
Microsoft microsoft.com
127,897,179
(594)
Python language support with extension access points for IntelliSense (Pylance), Debugging (Python Debugger), linting, formatting, ref...
Disable
Uninstall
Switch to Pre-Release Version
DETAILS
FEATURES
CHANGELOG
EXTENSION PACK
Python extension for Visual Studio Code
A Visual Studio Code extension with rich support for the Python language (for all actively supported Python versions), providing access points for extensions to seamlessly integrate and offer support for IntelliSense (Pylance), debugging (Python Debugger), formatting, linting, code navigation, refactoring, variable explorer, test explorer, and more!
Support for vscode.dev
The Python extension does offer some support when running on vscode.dev (which includes github.dev). This includes partial IntelliSense for open files in the editor.
Installed extensions
The Python extension will automatically install the following extensions by default to provide the best Python development experience in VS Code:
Pylance - to provide performant Python language support
Python Debugger - to provide a seamless debug experience with debugpy
These extensions are optional dependencies, meaning the Python extension will remain fully functional if they fail to be installed. Any or all of these extensions can be disabled or uninstalled at the expense of some features. Extensions installed through the marketplace are subject to the Marketplace Terms of Use.
Categories
Programming Languages
Debuggers
Other
Data Science
Machine Learning
Resources
Marketplace
Issues
Repository
License
Microsoft
More Info
Published 2016-01-19, 20:33:11
Last released 2024-06-27, 22:43:19
Last updated 2024-06-18, 12:13:01
Identifier ms-python.python
PROBLEMS
OUTPUT
TERMINAL
PORTS
DEBUG CONSOLE
suguresh@sugureshs-MacBook-Pro ~ %
zsh
Python


EXTENSIONS: MARKETPLACE
terr
HashiCorp Terraf...
Syntax highlighting and autoco...
HashiCorp
Terraform
Terraform configuration langua...
Anton Kulikov
Azure Terraform
VS Code extension for developi...
Microsoft
Terraform Auto...
Autocomplete for AWS resourc...
erdOs
Terraform doc sni...
Terraform code snippets (>800...
Run at Scale
Terraform Advan...
Advanced Syntax Highlighting f...
Patrick Miravalle
Terraform Azure ...
Sisir Sagar
Terraform
Semantic highlighting support f...
Betajob
Terraform Comple...
Autocomplete for terraform mo...
mgtrrz
MongoDB for VS...
Connect to MongoDB and Atlas...
MongoDB
Advanced Terrafo...
Provides 550+ code snippets o...
Richard Sentino
VSCode Terraform A...
VSCode extension to easily vie...
itayadler
Terrastate
Visual Studio Code extension t...
Welcome
Extension: HashiCorp Terraform
HashiCorp Terraform
v2.31.0
HashiCorp hashicorp.com
4,053,431
(194)
Syntax highlighting and autocompletion for Terraform
Install
DETAILS
FEATURES
CHANGELOG
Terraform Extension for Visual Studio Code
The HashiCorp Terraform Extension for Visual Studio Code (VS Code) with the Terraform Language Server adds editing features for Terraform files such as syntax highlighting, IntelliSense, code navigation, code formatting, module explorer and much more!
Quick Start
Get started writing Terraform configurations with VS Code in three steps:
Step 1: If you haven't done so already, install Terraform
Step 2: Install the Terraform Extension for VS Code.
Step 3: To activate the extension, open any folder or VS Code workspace containing Terraform files. Once activated, the Terraform language indicator will appear in the bottom right corner of the window.
New to Terraform? Read the Terraform Learning guides
See Usage for more detailed getting started information.
Read the Troubleshooting Guide for answers to common questions.
Categories
Programming Languages
Other
Formatters
Linters
Resources
Marketplace
Issues
Repository
License
HashiCorp
More Info
Published 2016-02-12, 14:01:09
Last released 2024-06-28, 01:03:16
Last updated 2024-06-28, 19:40:13
Identifier hashicorp.terraform
PROBLEMS
OUTPUT
TERMINAL
PORTS
DEBUG CONSOLE
suguresh@sugureshs-MacBook-Pro ~ %
zsh
Python

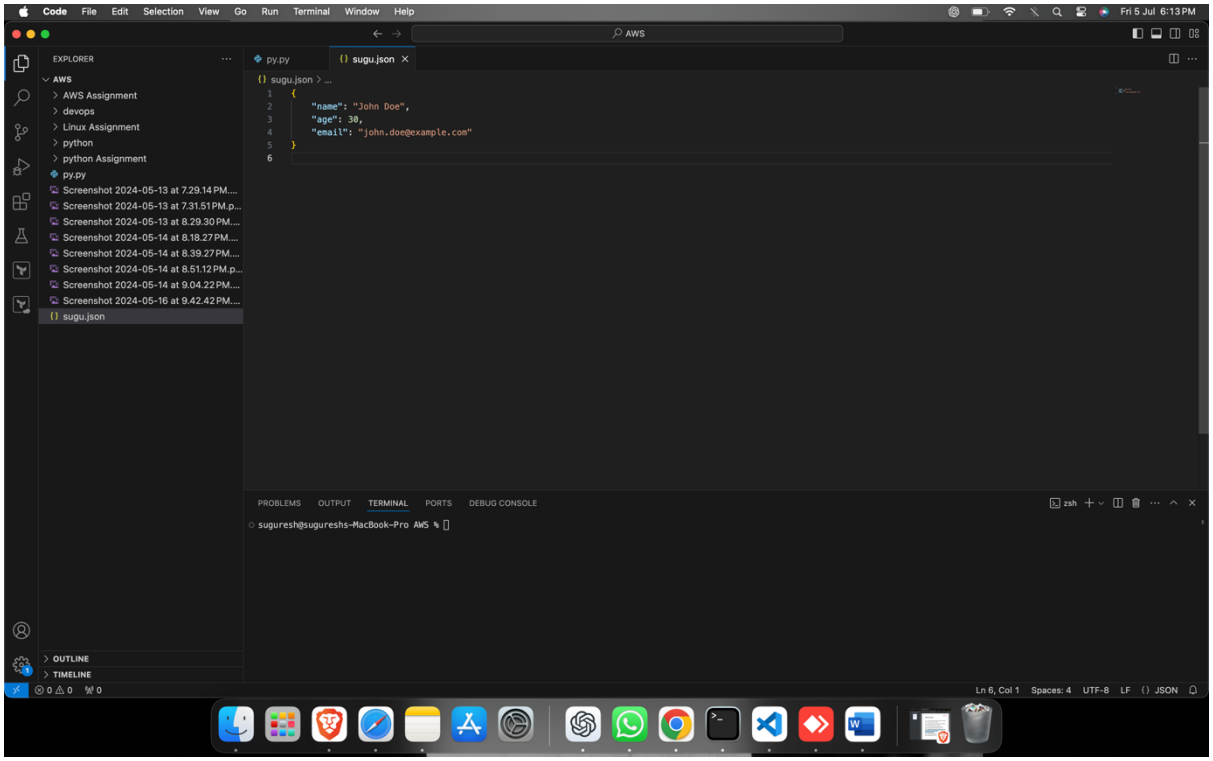

Search
EXTENSIONS: MARKETPLACE
terr
HashiCorp Terraform
Syntax highlighting and autoco...
HashiCorp
Terraform
Terraform configuration langua...
Anton Kulikov
Azure Terraform 764K ★ 2
VS Code extension for developi...
Microsoft
Install
Terraform Auto... 259K ★ 3.5
Autocomplete for AWS resourc...
erdOs
Terraform doc sni... 111K ★ 5
Terraform code snippets (>800...
Run at Scale
Terraform Advan... 98K ★ 4.5
Advanced Syntax Highlighting f...
Patrick Miravalle
Terraform Azure ... 49K ★ 4.5
Sisir Sagar
Terraform 39K ★ 3.5
Semantic highlighting support f...
Betajob
Terraform Comple... 28K ★ 5
Autocomplete for terraform mo...
mgtrrz
MongoDB for VS... 1.6M ★ 4.5
Connect to MongoDB and Atlas...
MongoDB
Advanced Terrafo... 48K ★ 4
Provides 550+ code snippets o...
Richard Sentino
VSCode Terraform A... 27K
VSCode extension to easily vie...
itayadler
Terrastate 8K ★ 5
Visual Studio Code extension t...
Welcome
Extension: HashiCorp Terraform
HashiCorp Terraform v2.31.0
HashiCorp hashicorp.com 4,053,431 ★★★☆☆ (194)
Syntax highlighting and autocompletion for Terraform
Disable
Uninstall
Switch to Pre-Release Version
DETAILS
FEATURES
CHANGELOG
Terraform Extension for Visual Studio Code
The HashiCorp Terraform Extension for Visual Studio Code (VS Code) with the Terraform Language Server adds editing features for Terraform files such as syntax highlighting, IntelliSense, code navigation, code formatting, module explorer and much more!
Quick Start
Get started writing Terraform configurations with VS Code in three steps:
Step 1: If you haven't done so already, install Terraform
Step 2: Install the Terraform Extension for VS Code.
Step 3: To activate the extension, open any folder or VS Code workspace containing Terraform files. Once activated, the Terraform language indicator will appear in the bottom right corner of the window.
New to Terraform? Read the Terraform Learning guides
See Usage for more detailed getting started information.
Read the Troubleshooting Guide for answers to common questions.
Categories
Programming Languages
Other
Formatters
Linters
Resources
Marketplace
Issues
Repository
License
HashiCorp
More Info
Published 2016-02-12, 14:01:09
Last released 2024-06-28, 01:03:16
Last updated 2024-06-28, 19:40:13
Identifier hashicorp.terraform
PROBLEMS
OUTPUT
TERMINAL
PORTS
DEBUG CONSOLE
suguresh@sugureshs-MacBook-Pro ~ %
zsh
Python

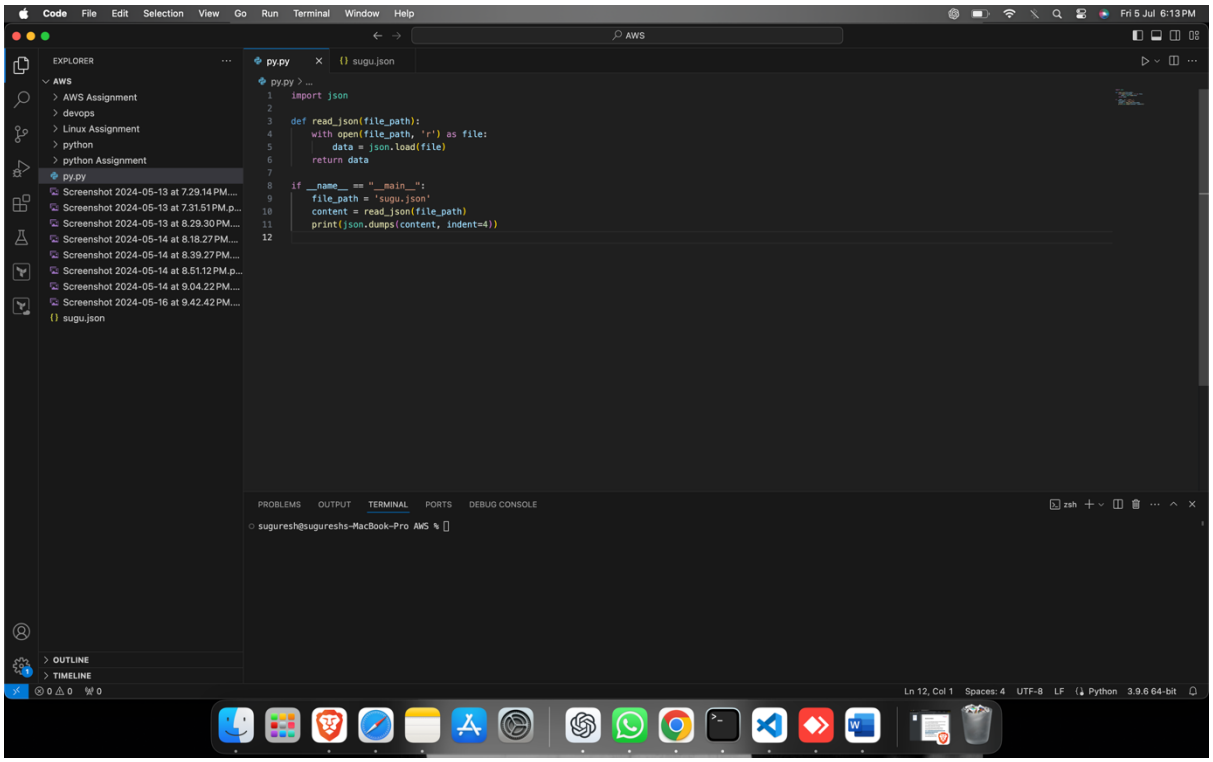
3. L3 - Create Python Console Application to randomly generate OTP kind of secure code

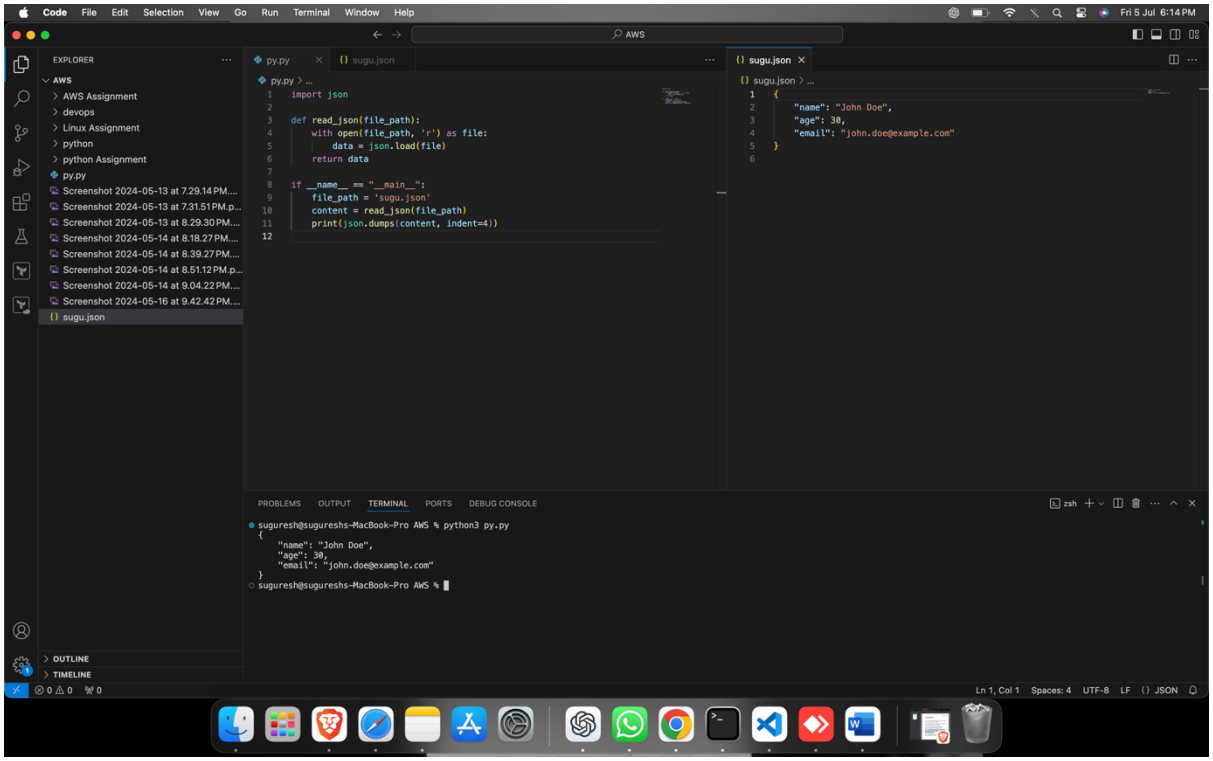




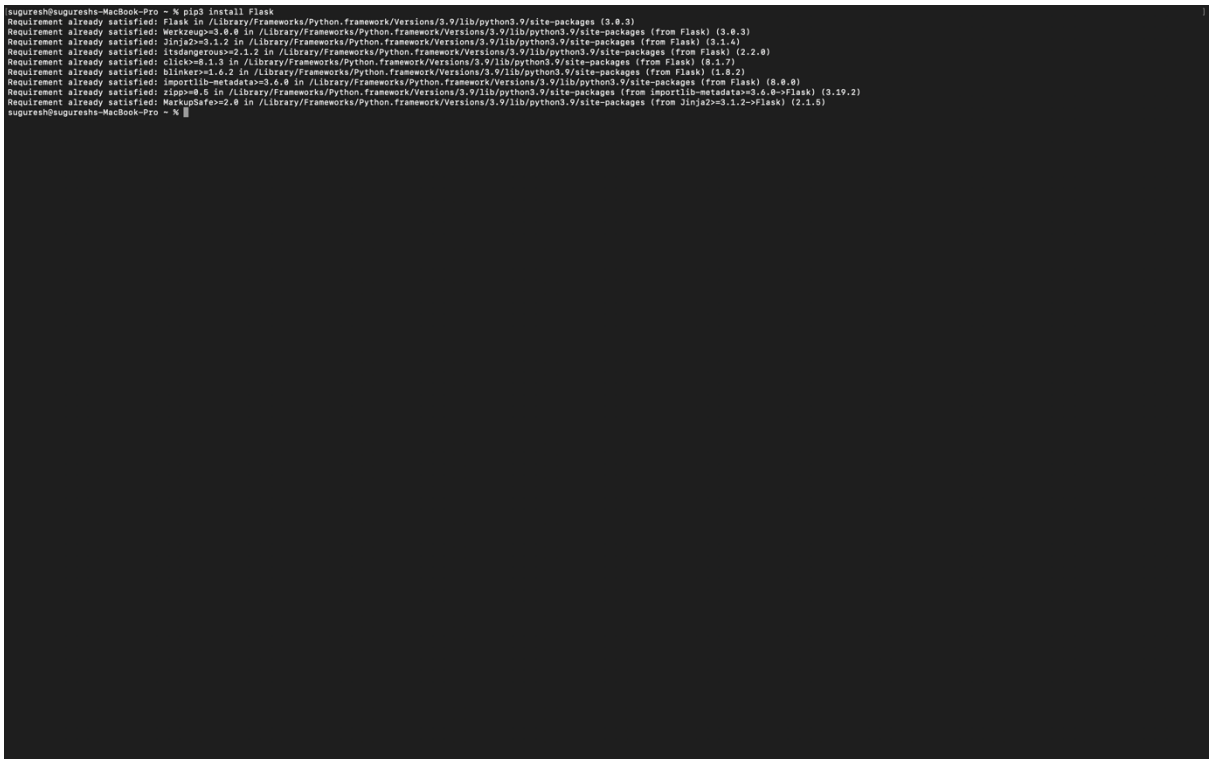
4. L4 - Create Python Console Application to read the contents of .json file and print in the VS Code python console output

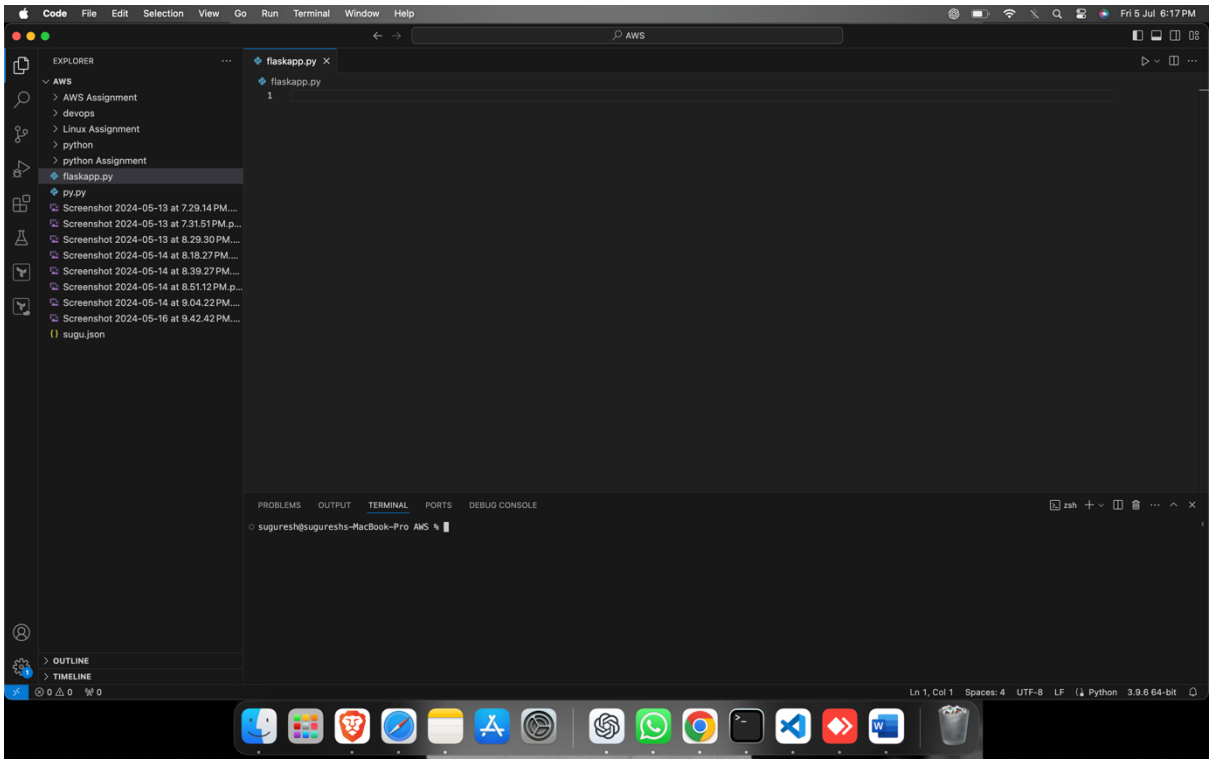


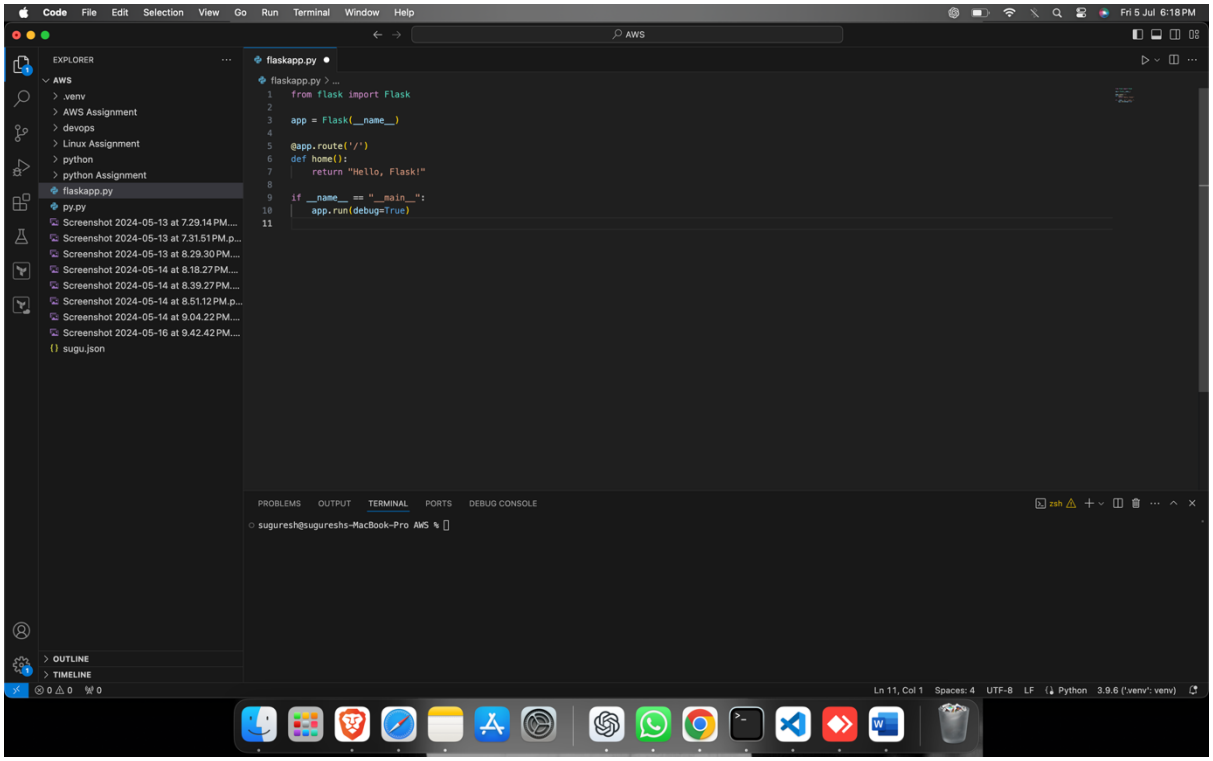


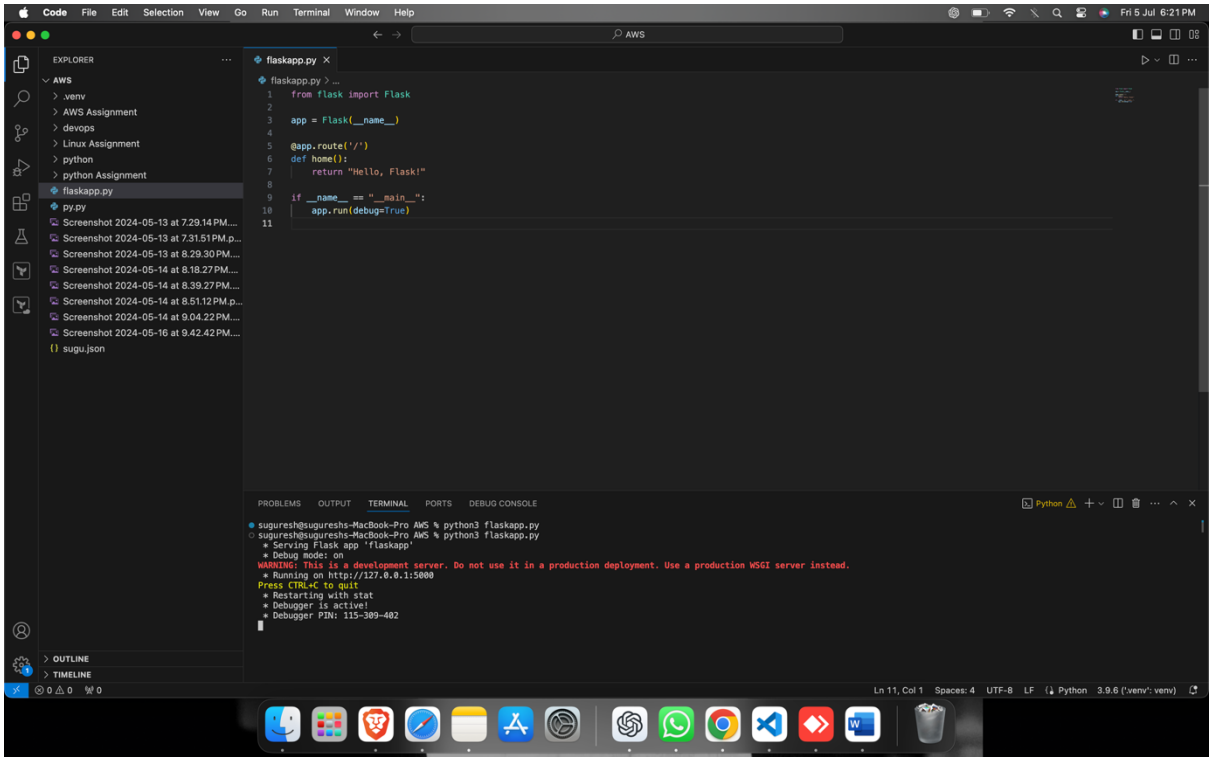

Code File Edit Selection View Go Run Terminal Window Help
Fri 5 Jul 6:14 PM
AWS
EXPLORER
AWS
AWS Assignment
devops
Linux Assignment
python
python Assignment
py.py
Screenshot 2024-05-13 at 7.29.14 PM....
Screenshot 2024-05-13 at 7.31.51 PM.p...
Screenshot 2024-05-13 at 8.29.30 PM....
Screenshot 2024-05-14 at 8.18.27 PM....
Screenshot 2024-05-14 at 8.39.27 PM....
Screenshot 2024-05-14 at 8.51.12 PM.p...
Screenshot 2024-05-14 at 9.04.22 PM....
Screenshot 2024-05-16 at 9.42.42 PM....
sugu.json
OUTLINE
TIMELINE
py.py
sugu.json
import json
def read_json(file_path):
with open(file_path, 'r') as file:
data = json.load(file)
return data
if __name__ == "__main__":
file_path = 'sugu.json'
content = read_json(file_path)
print(json.dumps(content, indent=4))
sugu.json
{
"name": "John Doe",
"age": 30,
"email": "john.doe@example.com"
}
PROBLEMS OUTPUT TERMINAL PORTS DEBUG CONSOLE
zsh
suguresh@sugureshs-MacBook-Pro AWS % python3 py.py
{
"name": "John Doe",
"age": 30,
"email": "john.doe@example.com"
}
suguresh@sugureshs-MacBook-Pro AWS %
Ln 1, Col 1 Spaces: 4 UTF-8 LF JSON

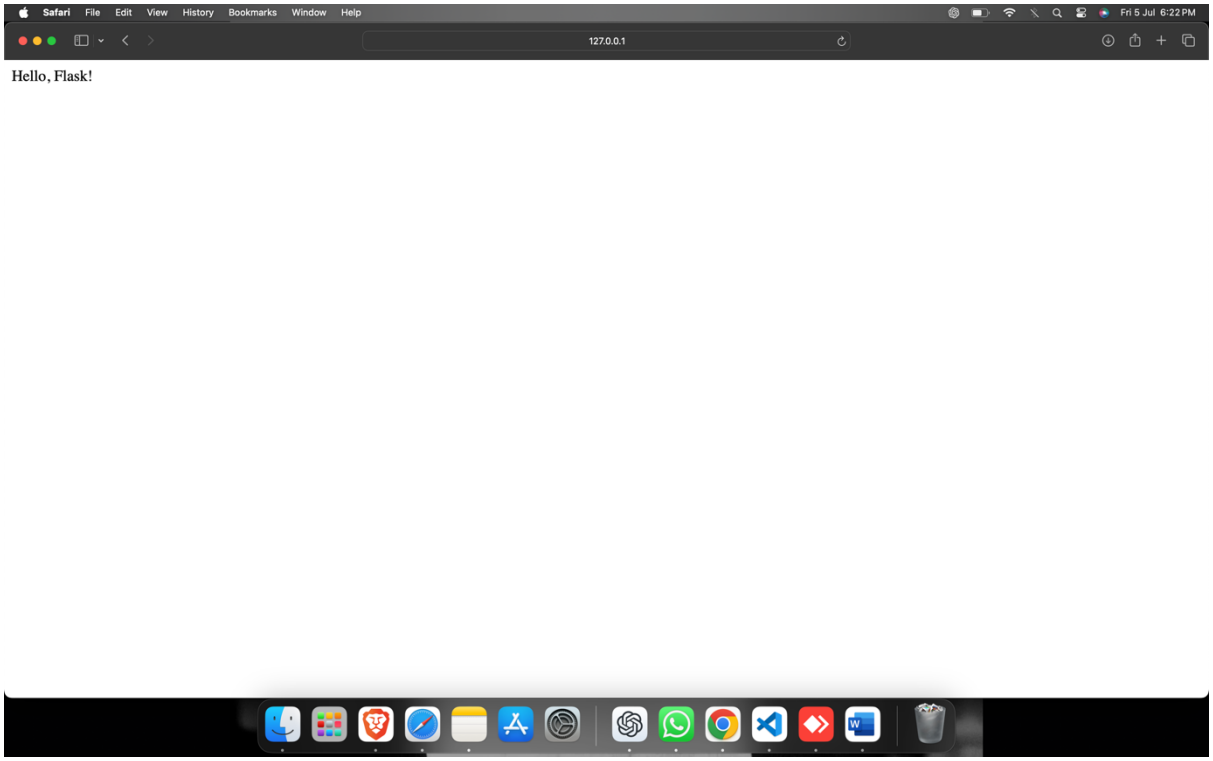
5. L5 - Create Python Web Application to using Flask Web Application Framework






Code File Edit Selection View Go Run Terminal Window Help
Fri 5 Jul 6:18 PM
AWS
EXPLORER
AWS
.venv
AWS Assignment
devops
Linux Assignment
python
python Assignment
flaskapp.py
py.py
Screenshot 2024-05-13 at 7.29.14 PM....
Screenshot 2024-05-13 at 7.31.51 PM.p...
Screenshot 2024-05-13 at 8.29.30 PM....
Screenshot 2024-05-14 at 8.18.27 PM....
Screenshot 2024-05-14 at 8.39.27 PM....
Screenshot 2024-05-14 at 8.51.12 PM.p...
Screenshot 2024-05-14 at 9.04.22 PM....
Screenshot 2024-05-16 at 9.42.42 PM....
sugu.json
flaskapp.py
flaskapp.py > ...
from flask import Flask
app = Flask(__name__)
@app.route('/')
def home():
return "Hello, Flask!"
if __name__ == "__main__":
app.run(debug=True)
PROBLEMS OUTPUT TERMINAL PORTS DEBUG CONSOLE
zsh
suguresh@sugureshs-MacBook-Pro AWS %
OUTLINE
TIMELINE
Ln 11, Col 1 Spaces: 4 UTF-8 LF Python 3.9.6 ('.venv': venv)


Code File Edit Selection View Go Run Terminal Window Help
Fri 5 Jul 6:21 PM
AWS
EXPLORER
AWS
.venv
AWS Assignment
devops
Linux Assignment
python
python Assignment
flaskapp.py
py.py
Screenshot 2024-05-13 at 7.29.14 PM....
Screenshot 2024-05-13 at 7.31.51 PM.p...
Screenshot 2024-05-13 at 8.29.30 PM....
Screenshot 2024-05-14 at 8.18.27 PM....
Screenshot 2024-05-14 at 8.39.27 PM....
Screenshot 2024-05-14 at 8.51.12 PM.p...
Screenshot 2024-05-14 at 9.04.22 PM....
Screenshot 2024-05-16 at 9.42.42 PM....
sugu.json
flaskapp.py
flaskapp.py > ...
from flask import Flask
app = Flask(__name__)
@app.route('/')
def home():
return "Hello, Flask!"
if __name__ == "__main__":
app.run(debug=True)
PROBLEMS OUTPUT TERMINAL PORTS DEBUG CONSOLE
Python
suguresh@sugureshs-MacBook-Pro AWS % python3 flaskapp.py
suguresh@sugureshs-MacBook-Pro AWS % python3 flaskapp.py
* Serving Flask app 'flaskapp'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 115-309-402
OUTLINE
TIMELINE
Ln 11, Col 1 Spaces: 4 UTF-8 LF Python 3.9.6 ('.venv': venv)


Safari File Edit View History Bookmarks Window Help
Fri 5 Jul 6:22 PM
127.0.0.1
Hello, Flask!