

# Homework 1

## CST205

### TASK 1: CREATE A VIRTUAL ENVIRONMENT

```
Windows PowerShell

Directory: C:\Users\Indik\desktop\CST205\Week_4

Mode                LastWriteTime         Length Name
----                -
d-----          9/15/2021   4:35 PM             Homework 1
-a-----          9/15/2021   4:36 PM      98515 steglitz.jpg
-a-----          9/15/2021   4:39 PM           0 Wednesday.py

PS C:\Users\Indik\desktop\CST205\Week_4> cd Homework_1
PS C:\Users\Indik\desktop\CST205\Week_4\Homework_1> ls

Directory: C:\Users\Indik\desktop\CST205\Week_4\Homework_1

Mode                LastWriteTime         Length Name
----                -
d-----          9/13/2021   5:05 PM             cst205env

PS C:\Users\Indik\desktop\CST205\Week_4\Homework_1> ls

Directory: C:\Users\Indik\desktop\CST205\Week_4\Homework_1

Mode                LastWriteTime         Length Name
----                -
d-----          9/13/2021   5:05 PM             cst205env

PS C:\Users\Indik\desktop\CST205\Week_4\Homework_1> ls .\cst205env\

Directory: C:\Users\Indik\desktop\CST205\Week_4\Homework_1\cst205env

Mode                LastWriteTime         Length Name
----                -
d-----          9/13/2021   5:05 PM             Include
d-----          9/13/2021   5:05 PM             Lib
d-----          9/13/2021   5:06 PM             Scripts
-a-----          9/13/2021   5:06 PM      117 pyvenv.cfg

PS C:\Users\Indik\desktop\CST205\Week_4\Homework_1>
```

### TASK 2: ACTIVATE YOUR VIRTUAL ENVIRONMENT

```
Windows PowerShell

PS C:\Users\Indik\desktop\CST205\Week_4\Homework_1> ls .\cst205env\

Directory: C:\Users\Indik\desktop\CST205\Week_4\Homework_1\cst205env

Mode                LastWriteTime         Length Name
----                -
d-----          9/13/2021   5:05 PM             Include
d-----          9/13/2021   5:05 PM             Lib
d-----          9/13/2021   5:06 PM             Scripts
-a-----          9/13/2021   5:06 PM      117 pyvenv.cfg

PS C:\Users\Indik\desktop\CST205\Week_4\Homework_1> .\cst205env\Scripts\Activate.ps1
(cst205env) PS C:\Users\Indik\desktop\CST205\Week_4\Homework_1> pip install --upgrade pip
pip : The term 'pip' is not recognized as the name of a cmdlet, function, script file, or operable program. Check the
spelling of the name, or if a path was included, verify that the path is correct and try again.
At line:1 char:1
+ pip install --upgrade pip
+ ~~~~~
+ CategoryInfo          : ObjectNotFound: (pip:String) [], CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException
```

### TASK 3: USE PIP TO INSTALL PYTHON PACKAGES

```

Windows PowerShell
PS C:\Users\Indik\desktop\CS205\Week_4\Homework_1> ls .\cst205env\

Directory: C:\Users\Indik\desktop\CS205\Week_4\Homework_1\cst205env

Mode                LastWriteTime         Length Name
----                -
d-----          9/13/2021 5:05 PM             Include
d-----          9/13/2021 5:05 PM             lib
d-----          9/13/2021 5:06 PM             Scripts
-a-----          9/13/2021 5:06 PM             117 pyvenv.cfg

PS C:\Users\Indik\desktop\CS205\Week_4\Homework_1> .\cst205env\Scripts\Activate.ps1
(cst205env) PS C:\Users\Indik\desktop\CS205\Week_4\Homework_1> pip install --upgrade pip
pip : The term 'pip' is not recognized as the name of a cmdlet, function, script file, or operable program. Check the
spelling of the name, or if a path was included, verify that the path is correct and try again.
At line:1 char:1
+ pip install --upgrade pip
~
+ CategoryInfo          : ObjectNotFound: (pip:String) [], CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException

(cst205env) PS C:\Users\Indik\desktop\CS205\Week_4\Homework_1> python -m pip install --upgrade pip
Requirement already satisfied: pip in c:\users\indik\desktop\cst205\week_4\homework_1\cst205env\lib\site-packages (21.2.3)
Collecting pip
  Downloading pip-21.2.4-py3-none-any.whl (1.6 MB)
    | 1.6 MB 3.2 MB/s
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 21.2.3
    Uninstalling pip-21.2.3:
      Successfully uninstalled pip-21.2.3
  Successfully installed pip-21.2.4
(cst205env) PS C:\Users\Indik\desktop\CS205\Week_4\Homework_1> pip install Pillow
Collecting Pillow
  Downloading Pillow-8.3.2-cp39-cp39-win_amd64.whl (3.2 MB)
    | 3.2 MB 3.3 MB/s
Installing collected packages: Pillow
Successfully installed Pillow-8.3.2
(cst205env) PS C:\Users\Indik\desktop\CS205\Week_4\Homework_1> pip list
Package Version
-----
Pillow  8.3.2
pip      21.2.4
setuptools 57.4.0
(cst205env) PS C:\Users\Indik\desktop\CS205\Week_4\Homework_1>

```

### TASK 4

The screenshot shows the Visual Studio Code interface. The Explorer pane on the left shows the file structure. The main editor displays a Python script named `hw1.py`. The script imports `PIL` and `random`, generates a random color, and creates an 8-bit grayscale image with text. The terminal window at the bottom shows the command `python hw1.py` and an error message: `ImportError: cannot import name 'PIL' from 'PIL' (unknown location)`.

```

File Edit Selection View Go Run Terminal Help
hw1.py - Untitled (Workspace) - Visual Studio Code
C:\Users\Indik\Desktop\CS205\Week_4\Homework_1> python hw1.py
1 from PIL import Image, ImageDraw
2
3 import random
4
5
6 # Generate a dark 8-bit color
7
8 my_color = random.randint(0, 150)
9
10
11 # Enter your name here as a string
12
13 my_name = "Roshan Indika Menik Arachchi Menik Arachchige "
14
15
16 # Create 8-bit grayscale image of size 200x200 using
17
18 # the randomly-generated 8-bit color
19
20 img = Image.new('L', (200,200), color = my_color)
21
22
23 # add text to drawing at position (30,30)
24
25 # in white
26
27 my_text = ImageDraw.Draw(img)
28
29 my_text.text((30, 30), my_name, fill=255)
30
31
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Filter (e.g. text, ts, ts, node_modules/**)
hw1.py C:\Users\Indik\Desktop\CS205\Week_4\Homework_1
ImportError: cannot import name 'PIL' from 'PIL' (unknown location) [1, 6]

```

```
Windows PowerShell
PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1> pip install --upgrade pip
+ CategoryInfo          : ObjectNotFound: (pip:String) [], CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException

PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1> python -m pip install --upgrade pip
Requirement already satisfied: pip in c:\users\indika\desktop\cst205\week_4\homework_1\cst205env\lib\site-packages (21.2.3)
Collecting pip
  Downloading pip-21.2.4-py3-none-any.whl (1.6 MB)
    |#####| 1.6 MB 3.2 MB/s
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 21.2.3
    Uninstalling pip-21.2.3:
      Successfully uninstalled pip-21.2.3
  Successfully installed pip-21.2.4
PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1> pip install Pillow
Collecting Pillow
  Downloading Pillow-8.3.2-cp39-cp39-win_amd64.whl (3.2 MB)
    |#####| 3.2 MB 3.3 MB/s
Installing collected packages: Pillow
Successfully installed Pillow-8.3.2
PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1> pip list
Package Version
-----
Pillow  8.3.2
pip      21.2.4
setuptools 57.4.0
PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1> python hw1
C:\Users\Indika\AppData\Local\Programs\Python\Python39\python.exe: can't open file 'C:\Users\Indika\Desktop\CST205\Week_4\Homework_1\hw1': [Errno 2] No such file or directory
PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1> ls

Directory: C:\Users\Indika\Desktop\CST205\Week_4\Homework_1

Mode                LastWriteTime         Length Name
----                -
d-----          9/13/2021   5:05 PM             cst205env
-a-----          9/15/2021   5:31 PM              570 hw1.py

PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1> python hw1.py
Traceback (most recent call last):
  File "C:\Users\Indika\Desktop\CST205\Week_4\Homework_1\hw1.py", line 13, in <module>
    my_name = Roshan_Indika_Menik_Arachchi_Menik_Arachchige
NameError: name 'Roshan_Indika_Menik_Arachchi_Menik_Arachchige' is not defined
PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1> python hw1.py
PS C:\Users\Indika\Desktop\CST205\Week_4\Homework_1>
```

os - tmp04n8\_hm.PNG

see all photos

+ Add to

🔍 🔍 🗑️ ❤️ ↺ 🗑️

Roshan Indika Menik Arachchi