Faculty of Technology and Engineering
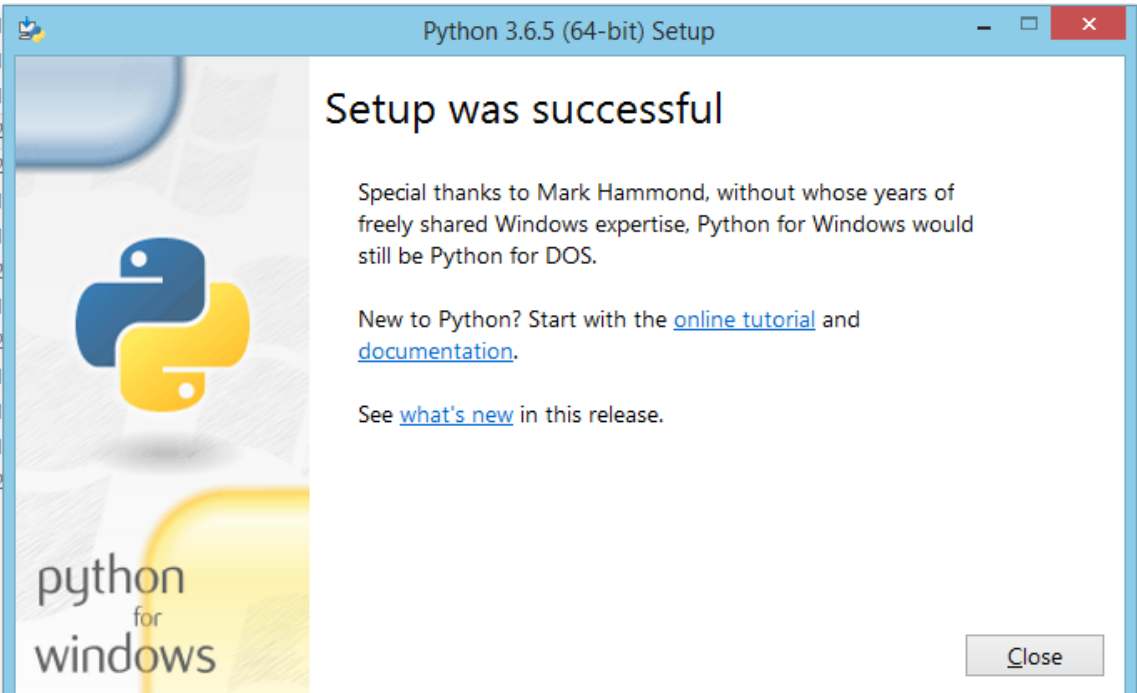
U & P U. Patel Department of Computer Engineering
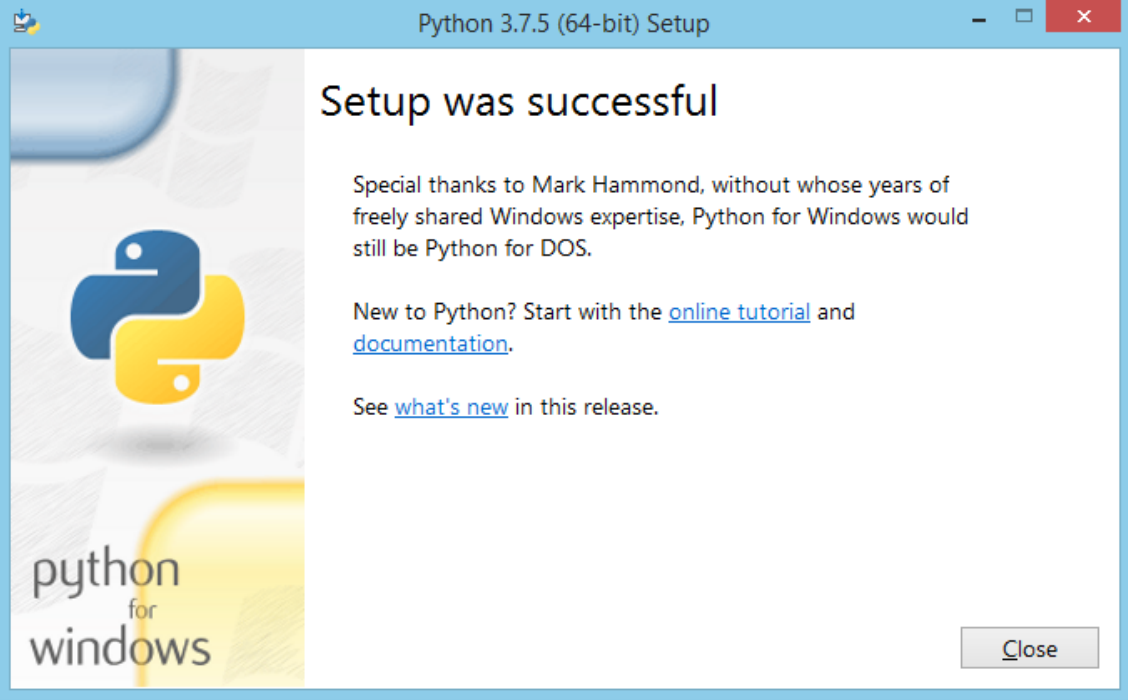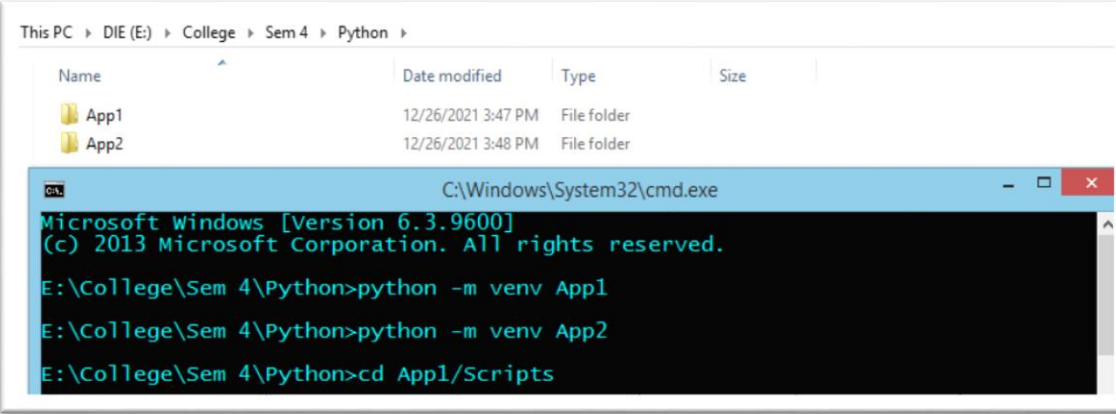
Date: 01 / 12 / 2021

Practical List

Academic Year	:	2021-22	Semester	:	4
Course code	:	CE259	Course name	:	Programming in Python

Note: Practical List is for Students. We need to cover concept require to implement respective practical

Sr. No.	Aim
1.	Installation & Configuration of Python(**3.6 or 3.7**) and Virtual Environment. Along with its all major editors, IDLE, Pycharm, Anaconda, Jupyter, Interpreter etc. **Note: Do not install the latest version of python due to some backward compatibility issues.** **Please take screenshots of each point mentioned in the assignment and upload .pdf file.**

| 2. | Create virtual Environment using python -m command |

```
E:\College\Sem 4\Python\App1\Scripts>activate

(App1) E:\College\Sem 4\Python\App1\Scripts>deactivate
E:\College\Sem 4\Python\App1\Scripts>pip install pandas
Collecting pandas
  Downloading https://files.pythonhosted.org/packages/b2/56/f886ed6f1777ffa9d54c
6e80231b69db8a1f52dcc33f5967b06a105dcfe0/pandas-1.3.5-cp37-cp37m-win_amd64.whl (
10.0MB)
                                            | 10.0MB 819kB/s
Collecting numpy>=1.17.3; platform_machine != "aarch64" and platform_machine !=
"arm64" and python_version < "3.10" (from pandas)
  Downloading https://files.pythonhosted.org/packages/22/a3/3a5469ebaca59100e50b
4300dd011eed943f2aad7c6a80a07966b985e2c6/numpy-1.21.5-cp37-cp37m-win_amd64.whl (
14.0MB)
                                            | 14.0MB 544kB/s
Collecting pytz>=2017.3 (from pandas)
  Downloading https://files.pythonhosted.org/packages/d3/e3/d9f046b5d1c94a3aeab1
5f1f867aa414f8ee9d196fae6865f1d6a0ee1a0b/pytz-2021.3-py2.py3-none-any.whl (503kB
)
                                            | 512kB 437kB/s
Collecting python-dateutil>=2.7.3 (from pandas)
  Downloading https://files.pythonhosted.org/packages/36/7a/87837f39d0296e723bb9
b62bbb257d0355c7f6128853c78955f57342a56d/python_dateutil-2.8.2-py2.py3-none-any.
whl (247kB)
                                            | 256kB 409kB/s
Collecting six>=1.5 (from python-dateutil>=2.7.3->pandas)
  Downloading https://files.pythonhosted.org/packages/d9/5a/e7c31adbe875f2abbb91
bd84cf2dc52d792b5a01506781dbcf25c91daf11/six-1.16.0-py2.py3-none-any.whl
Installing collected packages: numpy, pytz, six, python-dateutil, pandas
Successfully installed numpy-1.21.5 pandas-1.3.5 python-dateutil-2.8.2 pytz-2021
.3 six-1.16.0
WARNING: You are using pip version 19.2.3, however version 21.3.1 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' comm
and.

E:\College\Sem 4\Python\App1\Scripts>
```

```
E:\College\Sem 4\Python\App1\Scripts>pip list
Package         Version
--------------- -------
numpy           1.21.5
pandas          1.3.5
pip             19.2.3
python-dateutil 2.8.2
pytz            2021.3
setuptools      41.2.0
six             1.16.0
WARNING: You are using pip version 19.2.3, however version 21.3.1 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' comm
and.

E:\College\Sem 4\Python\App1\Scripts>cd..

E:\College\Sem 4\Python\App1>cd..

E:\College\Sem 4\Python>cd App2/Scripts

E:\College\Sem 4\Python\App2\Scripts>pip list
Package    Version
---------- -------
pip        19.2.3
setuptools 41.2.0
WARNING: You are using pip version 19.2.3, however version 21.3.1 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' comm
and.

E:\College\Sem 4\Python\App2\Scripts>
```

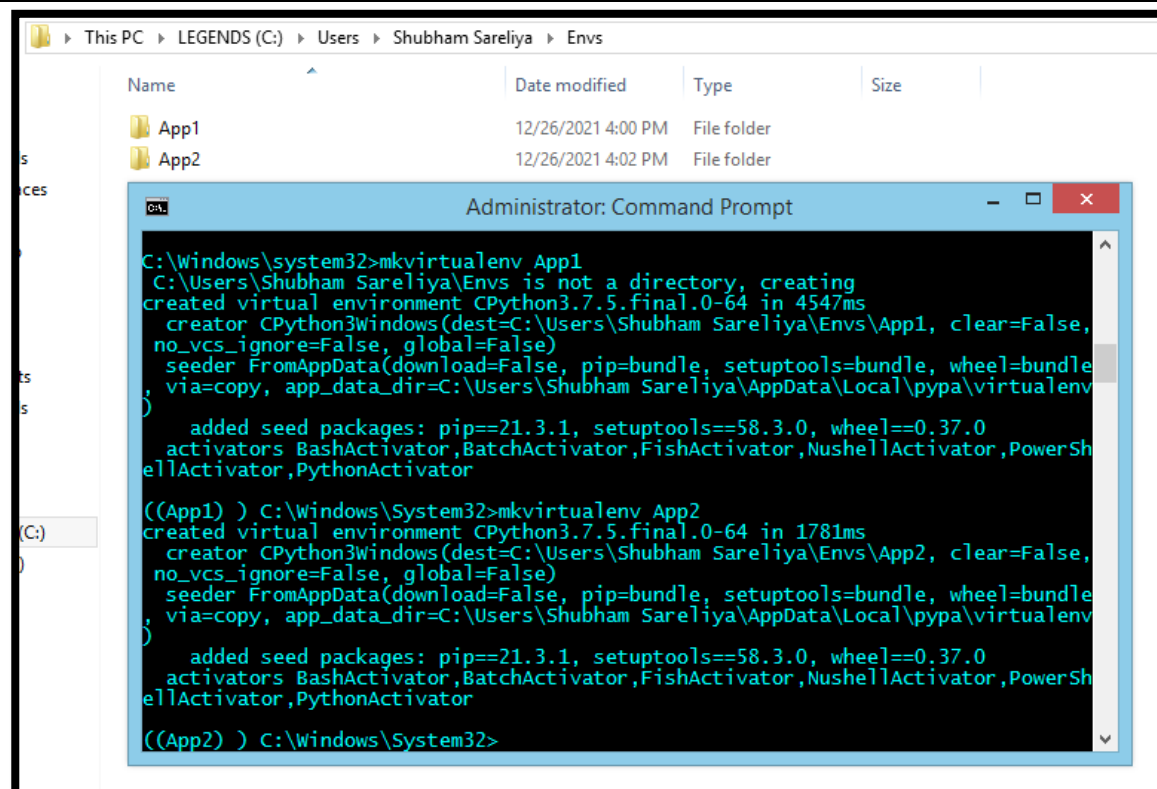| 3.	Creating Virtual Environment using python package virtualenvwrapper

```
Administrator: Command Prompt                                    –  □  ×

Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Windows\system32>pip install virtualenvwrapper-win
Collecting virtualenvwrapper-win
  Using cached https://files.pythonhosted.org/packages/d3/07/7599a80e13e58e0bb56
1ed03c55a2a84872b64ae50cbc40d9bf7ebabbdd9/virtualenvwrapper-win-1.2.6.tar.gz
Collecting virtualenv (from virtualenvwrapper-win)
  Using cached https://files.pythonhosted.org/packages/ac/8a/05e8d8a3ac88a3c4ebe
c1fe2b1b4730e6e6ebdddb52cfd6cea6803de4624/virtualenv-20.10.0-py2.py3-none-any.wh
l
Collecting platformdirs<3,>=2 (from virtualenv->virtualenvwrapper-win)
  Using cached https://files.pythonhosted.org/packages/b1/78/dcfd84d3aabd46a9c77
260fb47ea5d244806e4daef83aa6fe5d83adb182c/platformdirs-2.4.0-py3-none-any.whl
Collecting filelock<4,>=3.2 (from virtualenv->virtualenvwrapper-win)
  Using cached https://files.pythonhosted.org/packages/e8/3b/b59c7bcacc4cccafcd6
e927a9e191268657e79a0a75530132cbf03b22c47/filelock-3.4.0-py3-none-any.whl
Collecting backports.entry-points-selectable>=1.0.4 (from virtualenv->virtualenv
wrapper-win)
  Using cached https://files.pythonhosted.org/packages/6d/2e/a6789183415658c7f2c
41da8599d53077bd222233039f5c92bffbf23b28d/backports.entry_points_selectable-1.1.
1-py2.py3-none-any.whl
Collecting six<2,>=1.9.0 (from virtualenv->virtualenvwrapper-win)
  Using cached https://files.pythonhosted.org/packages/d9/5a/e7c31adbe875f2abbb9
1bd84cf2dc52d792b5a01506781dbcf25c91daf11/six-1.16.0-py2.py3-none-any.whl
Collecting distlib<1,>=0.3.1 (from virtualenv->virtualenvwrapper-win)
  Using cached https://files.pythonhosted.org/packages/ac/a3/8ee4f54d5f12e16eeed
a6b7df3dfdbda24e6cc572c86ff959a4ce110391b/distlib-0.3.4-py2.py3-none-any.whl
Collecting importlib-metadata>=0.12; python_version < "3.8" (from virtualenv->vi
rtualenvwrapper-win)
  Using cached https://files.pythonhosted.org/packages/f9/6c/a14560ec00a14f50fdb
3e91665563500b55f3c672e621c3ef159d351e9f7/importlib_metadata-4.10.0-py3-none-any
.whl
Collecting zipp>=0.5 (from importlib-metadata>=0.12; python_version < "3.8"->vir
tualenv->virtualenvwrapper-win)
  Using cached https://files.pythonhosted.org/packages/bd/df/d4a4974a3e3957fd1c1
fa3082366d7fff6e428ddb55f074bf64876f8e8ad/zipp-3.6.0-py3-none-any.whl
Collecting typing-extensions>=3.6.4; python_version < "3.8" (from importlib-meta
data>=0.12; python_version < "3.8"->virtualenv->virtualenvwrapper-win)
  Using cached https://files.pythonhosted.org/packages/05/e4/baf0031e39cf545f0c9
edd5b1a2ea12609b7fcba2d58e118b11753d68cf0/typing_extensions-4.0.1-py3-none-any.w
hl
Installing collected packages: platformdirs, filelock, zipp, typing-extensions,
importlib-metadata, backports.entry-points-selectable, six, distlib, virtualenv,
 virtualenvwrapper-win
  Running setup.py install for virtualenvwrapper-win ... done
Successfully installed backports.entry-points-selectable-1.1.1 distlib-0.3.4 fil
elock-3.4.0 importlib-metadata-4.10.0 platformdirs-2.4.0 six-1.16.0 typing-exten
sions-4.0.1 virtualenv-20.10.0 virtualenvwrapper-win-1.2.6 zipp-3.6.0
WARNING: You are using pip version 19.2.3, however version 21.3.1 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' comm
and.

C:\Windows\system32>
```
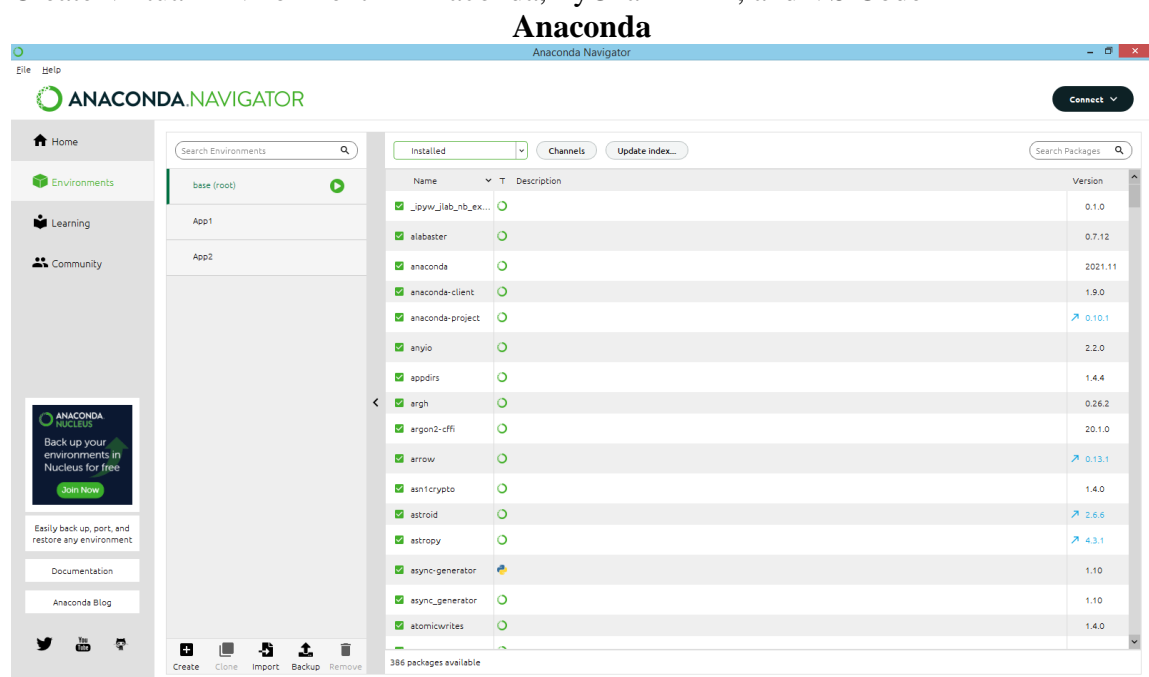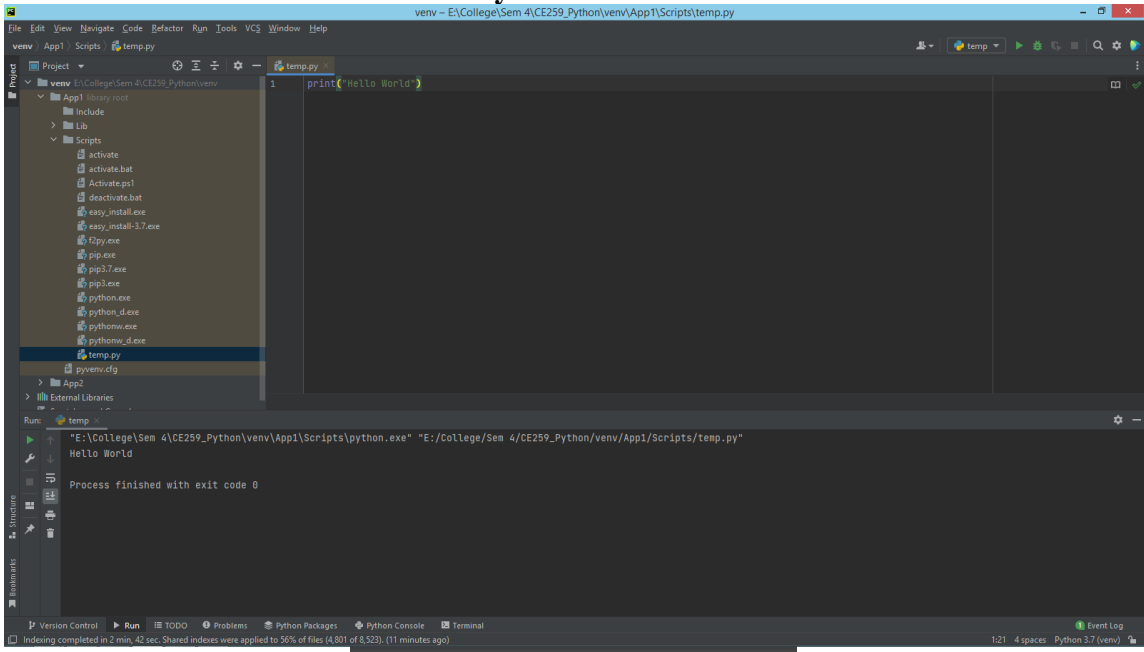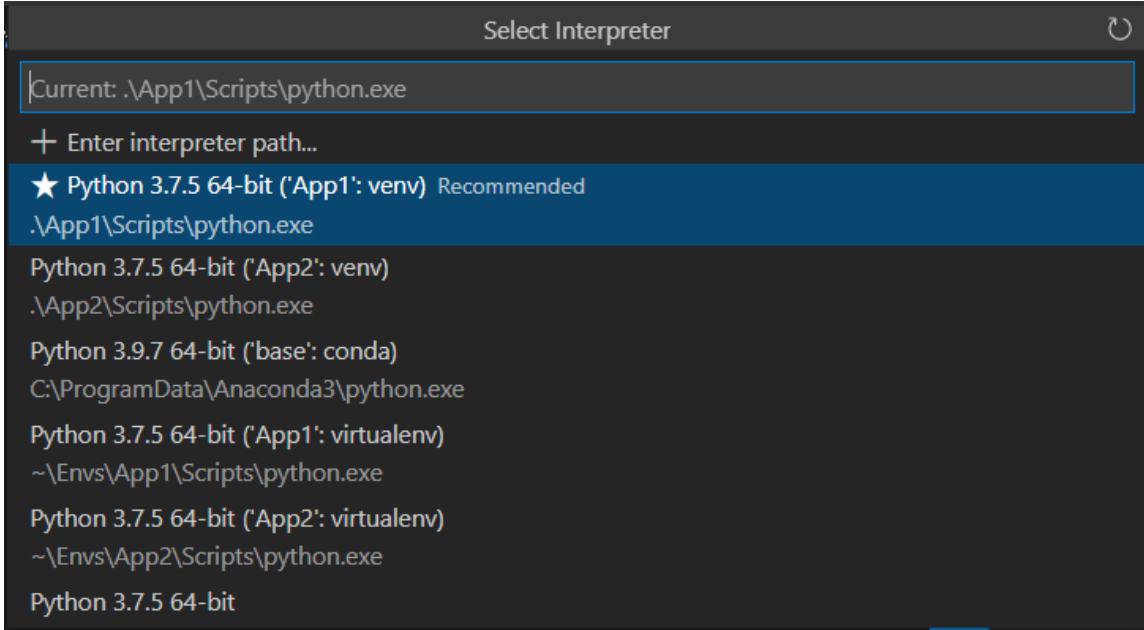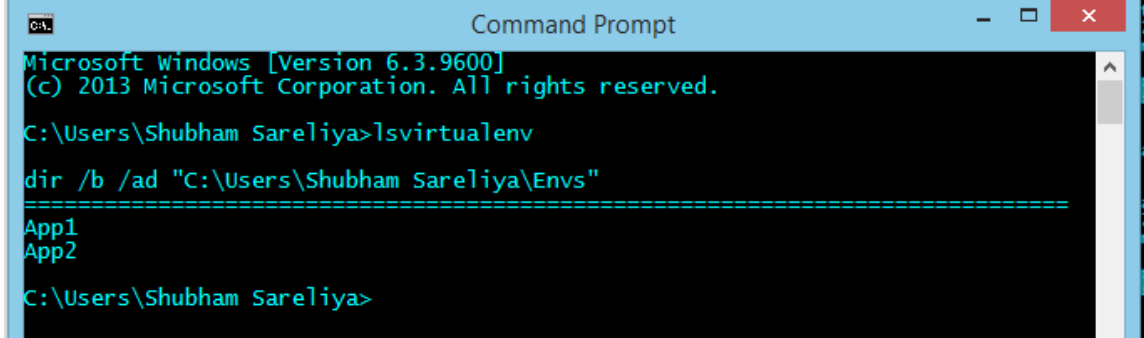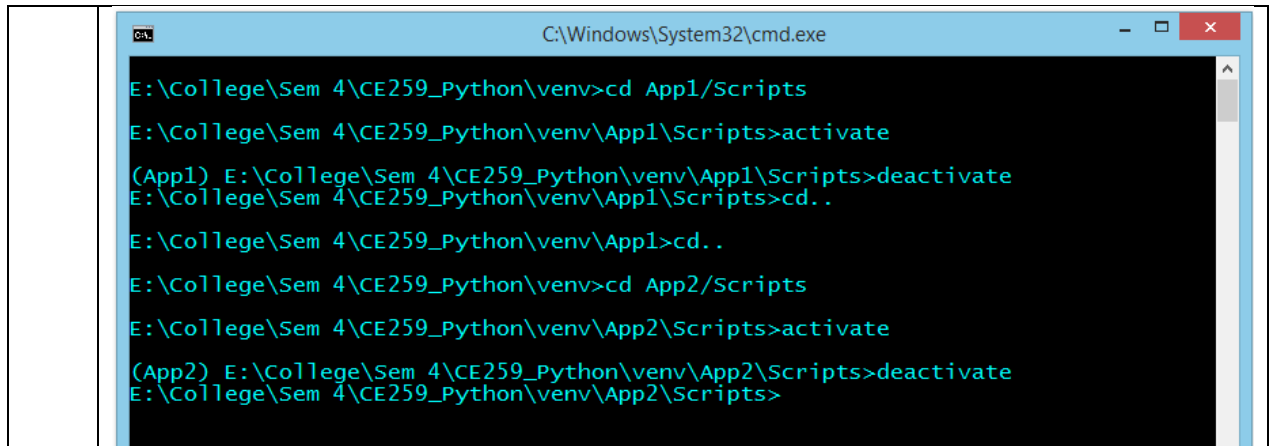
| 4. | Create Virtual Environment in Anaconda, PyCharm IDE, and VS Code IDE |

Anaconda

	PyCharm IDE
	1:21 4 spaces Python 3.7 (venv)
	VS Code IDE
5.	List all virtual environment
6.	Switch between virtual environment using activate and deactivate option.

SHUBHAM SARELIYA

```
C:\Windows\System32\cmd.exe

E:\College\Sem 4\CE259_Python\venv>cd App1/Scripts

E:\College\Sem 4\CE259_Python\venv\App1\Scripts>activate

(App1) E:\College\Sem 4\CE259_Python\venv\App1\Scripts>deactivate
E:\College\Sem 4\CE259_Python\venv\App1\Scripts>cd..

E:\College\Sem 4\CE259_Python\venv\App1>cd..

E:\College\Sem 4\CE259_Python\venv>cd App2/Scripts

E:\College\Sem 4\CE259_Python\venv\App2\Scripts>activate

(App2) E:\College\Sem 4\CE259_Python\venv\App2\Scripts>deactivate
E:\College\Sem 4\CE259_Python\venv\App2\Scripts>
```