

CS-599 Deep Learning

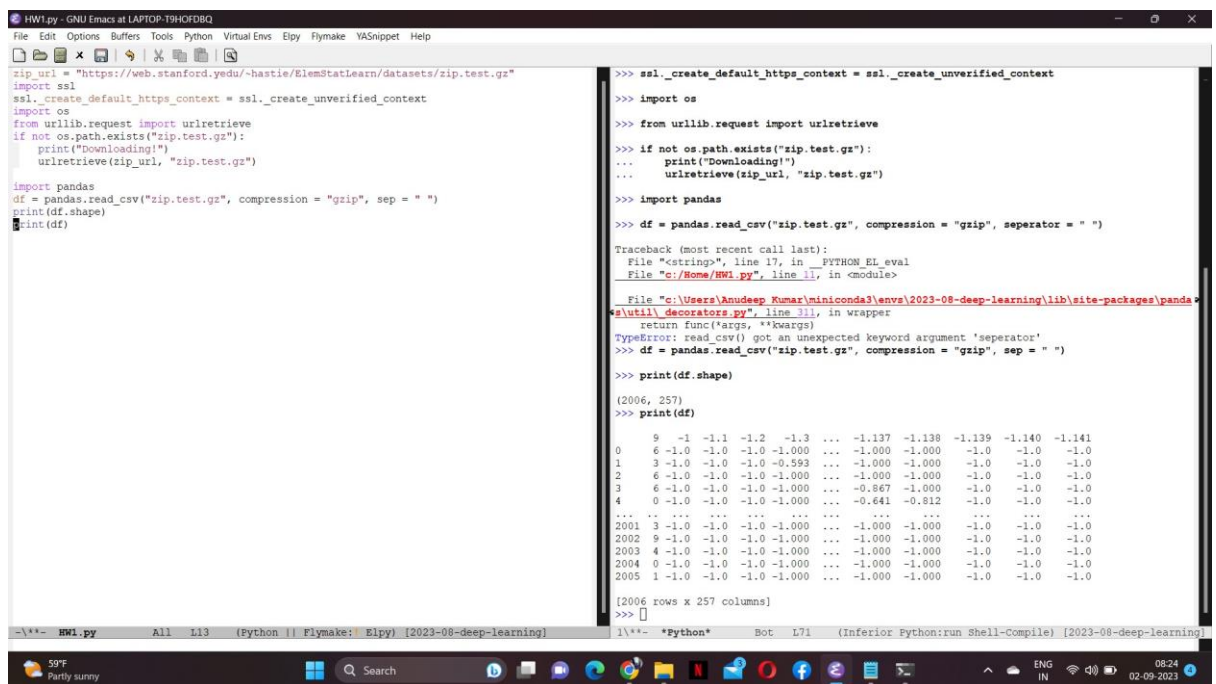
Homework – 1

1. Python Code:

```
zip_url = "https://web.stanford.yedu/~hastie/ElemStatLearn/datasets/zip.test.gz"
import ssl
ssl._create_default_https_context = ssl._create_unverified_context
import os
from urllib.request import urlretrieve
if not os.path.exists("zip.test.gz"):
    print("Downloading!")
    urlretrieve(zip_url, "zip.test.gz")

import pandas
df = pandas.read_csv("zip.test.gz", compression = "gzip", sep = " ")
print(df.shape)
print(df)
```

2. Screenshot of output:



```
HW1.py - GNU Emacs at LAPTOP-T9HOFDBQ
File Edit Options Buffers Tools Python Virtual Envs Elpy Flymake VASnippet Help

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...     urlretrieve(zip_url, "zip.test.gz")
>>> import pandas
>>> df = pandas.read_csv("zip.test.gz", compression = "gzip", separator = " ")
Traceback (most recent call last):
  File "<string>", line 17, in _PYTHON_EVAL
  File "c:/Users/Amudesp_Kumar/miniconda3/envs/2023-08-deep-learning/lib/site-packages/pandas
*utils/decorators.py", line 311, in wrapper
    return func(*args, **kwargs)
TypeError: read_csv() got an unexpected keyword argument 'seperator'
>>> df = pandas.read_csv("zip.test.gz", compression = "gzip", sep = " ")
>>> print(df.shape)
(2006, 257)
>>> print(df)
   9  -1  -1.1  -1.2  -1.3  ...  -1.137  -1.138  -1.139  -1.140  -1.141
0  6 -1.0  -1.0  -1.0 -1.000  ...  -1.000  -1.000  -1.0  -1.0  -1.0
1  3 -1.0  -1.0  -1.0 -0.593  ...  -1.000  -1.000  -1.0  -1.0  -1.0
2  6 -1.0  -1.0  -1.0 -1.000  ...  -1.000  -1.000  -1.0  -1.0  -1.0
3  6 -1.0  -1.0  -1.0 -1.000  ...  -0.867  -1.000  -1.0  -1.0  -1.0
4  0 -1.0  -1.0  -1.0 -1.000  ...  -0.641  -0.812  -1.0  -1.0  -1.0
... ..
2001 3 -1.0  -1.0  -1.0 -1.000  ...  -1.000  -1.000  -1.0  -1.0  -1.0
2002 9 -1.0  -1.0  -1.0 -1.000  ...  -1.000  -1.000  -1.0  -1.0  -1.0
2003 4 -1.0  -1.0  -1.0 -1.000  ...  -1.000  -1.000  -1.0  -1.0  -1.0
2004 0 -1.0  -1.0  -1.0 -1.000  ...  -1.000  -1.000  -1.0  -1.0  -1.0
2005 1 -1.0  -1.0  -1.0 -1.000  ...  -1.000  -1.000  -1.0  -1.0  -1.0

[2006 rows x 257 columns]
>>>
```

3. Summary:

- Install Emacs and Conda in your system.
- Download the packages elpy, conda from M-x package-list-packages.
- Create conda environment in anaconda prompt.

- Activate conda environment through emacs.
- Run the python shell by creating python program.
- Check the output and take a screenshot.