

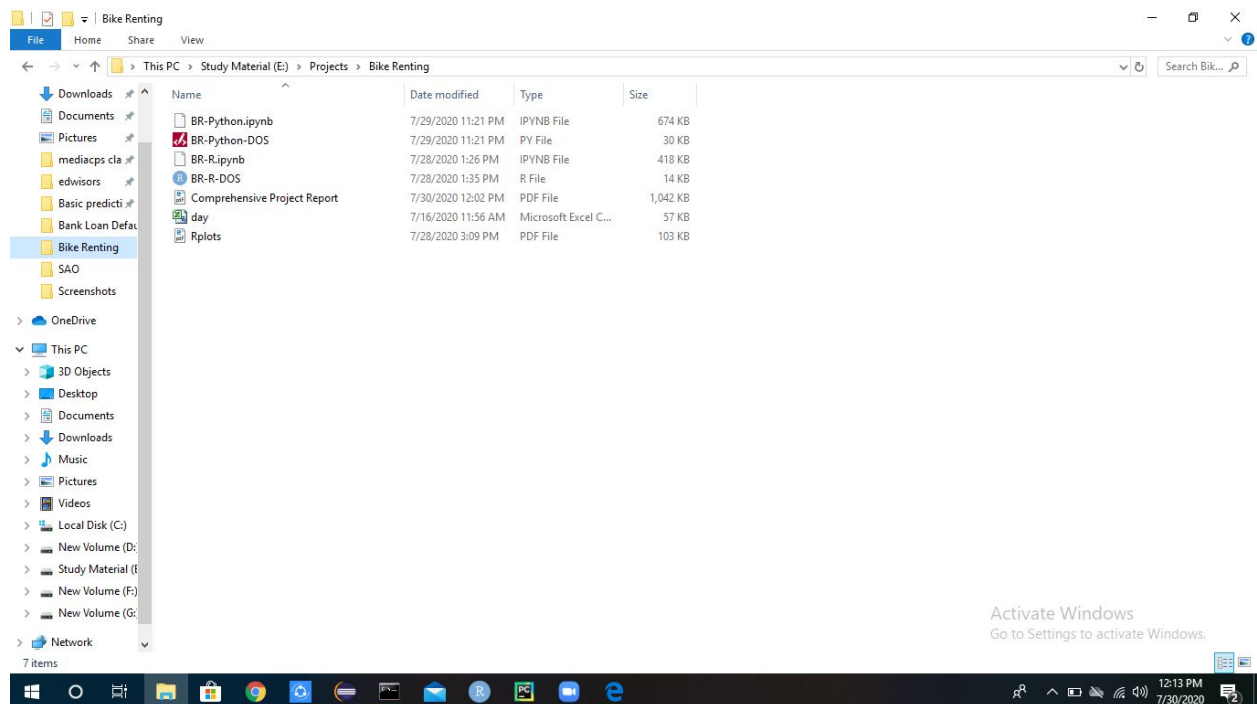
★ Instruction to deploy and run code

1. Python and R code files:

1.1 DOS executable code files

1.2 Jupyter notebooks

1. Python and R code files: Just in case, if the R file charts are not able to work properly, so I've attached these two alternative Jupyter notebooks for the evaluation of both Python and R files. Also, the plots will not appear when we R script through command line and rather they will be stored in a pdf format (Rplots.pdf) in the current working directory whose snippet I've attached just below:



1.1 DOS executable code files Python-

For Python: BR-Python-DOS.py

Start

```
Command Prompt - python BR-Python-DOS.py
E:\Projects\Bike Renting>python BR-Python-DOS.py
Sample case : 2011-01-05      1      0      1      0      3      1      1      0.226957      0.229270      0.436957      0.186900      c-82      r-1518      cnt-1600

Enter date2011-01-05
Enter season1
Enter yr0
Enter month1
Enter holiday0
Enter weekday3
Enter workingday1
Enter weathersit1
Enter temp0.2269
Enter atemp0.229
Enter humidity0.4369
Enter windspeed0.186_

Activate Windows
Go to Settings to activate Windows.
```

End

```
Command Prompt
For input data:
mean square error 2.948455530262597
mean absolute error 1.7097954623394533
Root mean square error 1.7171067323444391
(572, 10) (145, 10) (572, 2) (145, 2)
C:\Users\Love Karnval\AppData\Local\Programs\Python\Python37\lib\site-packages\xgboost\core.py:444: UserWarning: Use subset (sliced data) of np.ndarray is not recommended because it will generate extra copies and increase memory consumption
  "because it will generate extra copies and increase " +

For Testing dataset:
mean square error 0.12255537955166484
mean absolute error 0.23308414208408543
Root mean square error 0.35007910470587195

r2 score: 0.8837544675733378

Actual value: 3118
Predicted value: 4017

For input data:
mean square error 2.8447100270509633
mean absolute error 1.6785699906596525
Root mean square error 1.686626819142564
(572, 10) (145, 10) (572, 2) (145, 2)

For Testing dataset:
mean square error 2.8447100270509633
mean absolute error 1.6785699906596525
Root mean square error 1.686626819142564

r2 score: 0.8837544675733378

Actual value: 3118
Predicted value: 3622

For input data:
mean square error 3.0847810010015926
mean absolute error 1.7562534979272486
Root mean square error 1.7563544633705328

Activate Windows
Go to Settings to activate Windows.
```

For R : BR-R-DOS.r

Start

```
Command Prompt - Rscript BR-R-DOS.r
[1] "sample case values: 2012-12-26 1 1 12 0 3 1 3 0.243333 0.220333 0.823333 0.316546 9 432 441"
[1] "Enter dteday: "
2012-12-26
Warning message:
WAS introduced by coercion
[1] "Enter season: "
1
[1] "Enter yr: "
1
[1] "Enter mnth: "
12
[1] "Enter holiday: "
0
[1] "Enter weekday: "
3
[1] "Enter workingday: "
1
[1] "Enter weathersit: "
3
[1] "Enter temp: "
0.243
[1] "Enter atemp: "
0.2203
[1] "Enter hum: "
0.823
[1] "Enter windspeed: "
0.3165
```

End

```
Command Prompt
Actual count value
.441
Predicted count value
.739Mean Square Error = 0.48
Root mean square error = 0.59
R-Square value = 0.67
Actual count value
.441
Predicted count value
.154Mean Square Error = 0.24
Root mean square error = 0.28
R-Square value = 0.93
Actual count value
.441
Predicted count value
.548Mean Square Error = 0.21
Root mean square error = 0.25
R-Square value = 0.94
Actual count value
.441
Predicted count value
.373Mean Square Error = 0.01
Root mean square error = 0.01
R-Square value = 1.00
Actual count value
.441
Predicted count value
.414Mean Square Error = 0.48
Root mean square error = 0.69
R-Square value = -0.01
Actual count value
.441
Predicted count value
.891Warning message:
In pred ~ y :
longer object length is not a multiple of shorter object length
Mean Square Error = 0.45
Root mean square error = 0.56
R-Square value = 0.61
Actual count value
.441
Predicted count value
.934
E:\Projects\Bike Renting>
```

1.2 Jupyter notebooks

For Python - BR-Python.ipynb

For R - BR-R.ipynb

----- **Thank you for your time to read the comprehensive report** -----