

Unit 2.1 Graded Assignment: Working with jupyter notebook

Instructions:

Write a bash command which formats markdown cells in file my_notebook.ipynb(nbqa git hub page might be helpful)

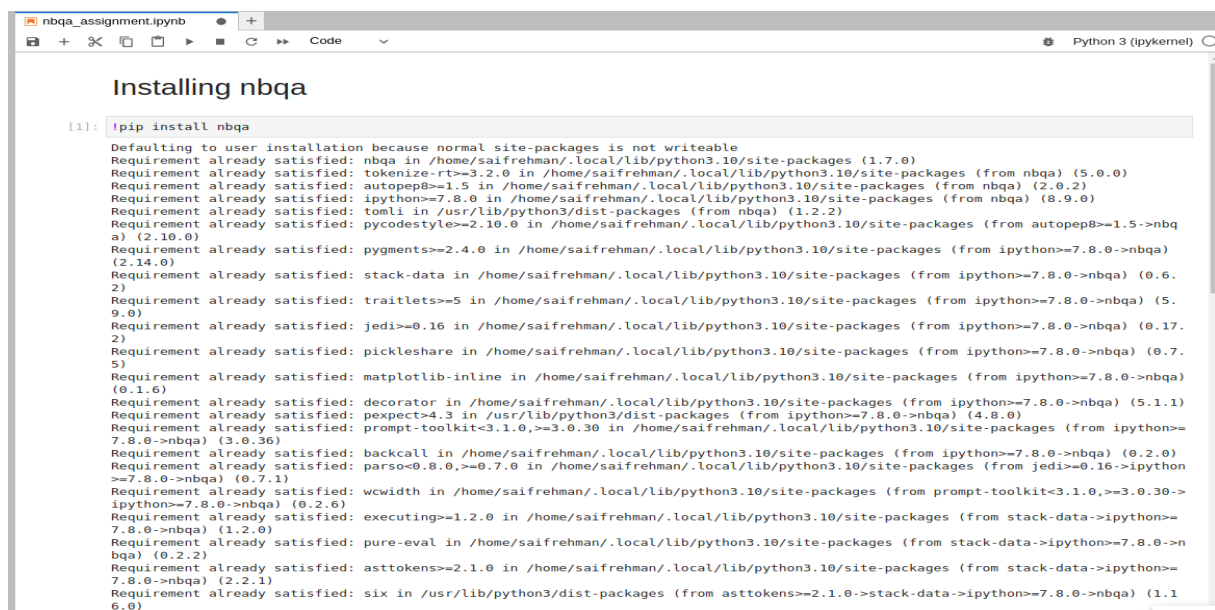
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Solution:

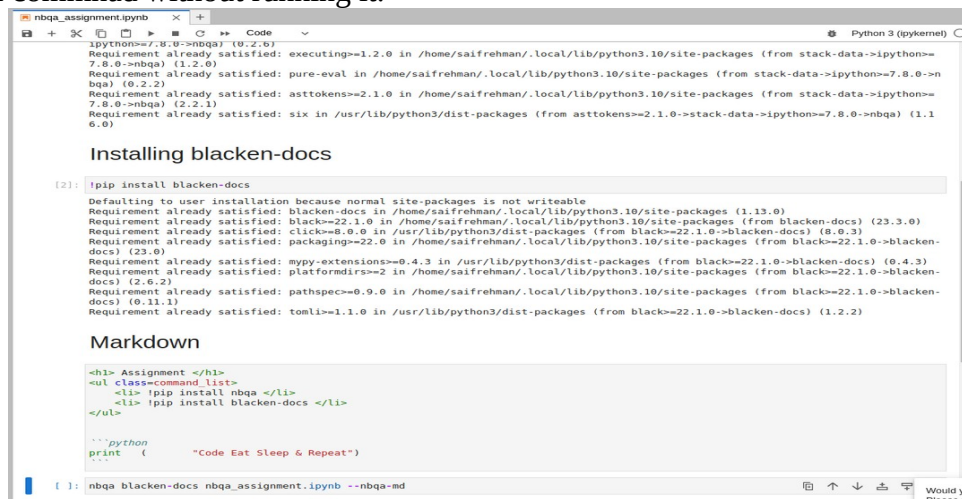
In this assignment we use nbqa library to produce a clean, easy to use effective tool for formatting and increasing the readability of our notebook.

1. First we install nbqa, blackendocs library by using command `!pip install nbqa`, `!pip install blacken-docs`.



```
[1]: !pip install nbqa
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: nbqa in /home/saifrehman/.local/lib/python3.10/site-packages (1.7.0)
Requirement already satisfied: tokenize-rt>=3.2.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from nbqa) (5.0.0)
Requirement already satisfied: autopep8>=1.5 in /home/saifrehman/.local/lib/python3.10/site-packages (from nbqa) (2.0.2)
Requirement already satisfied: ipython>=7.8.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from nbqa) (8.9.0)
Requirement already satisfied: toml in /usr/lib/python3/dist-packages (from nbqa) (1.2.2)
Requirement already satisfied: pycodestyle>=2.10.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from autopep8>=1.5->nbqa) (2.10.0)
Requirement already satisfied: pygments>=2.4.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (2.14.0)
Requirement already satisfied: stack-data in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (0.6.2)
Requirement already satisfied: traitlets>=5 in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (5.9.0)
Requirement already satisfied: jedi>=0.16 in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (0.17.2)
Requirement already satisfied: pickleshare in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (0.7.5)
Requirement already satisfied: matplotlib-inline in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (0.1.6)
Requirement already satisfied: decorator in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (5.1.1)
Requirement already satisfied: pexpect>4.3 in /usr/lib/python3/dist-packages (from ipython>=7.8.0->nbqa) (4.8.0)
Requirement already satisfied: prompt-toolkit<3.1.0,>=3.0.30 in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (3.0.36)
Requirement already satisfied: backcall in /home/saifrehman/.local/lib/python3.10/site-packages (from ipython>=7.8.0->nbqa) (0.2.0)
Requirement already satisfied: parso<0.8.0,>=0.7.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from jedi>=0.16->ipython>=7.8.0->nbqa) (0.7.1)
Requirement already satisfied: wcwidth in /home/saifrehman/.local/lib/python3.10/site-packages (from prompt-toolkit<3.1.0,>=3.0.30->ipython>=7.8.0->nbqa) (0.2.6)
Requirement already satisfied: executing>=1.2.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from stack-data->ipython>=7.8.0->nbqa) (1.2.0)
Requirement already satisfied: pure-eval in /home/saifrehman/.local/lib/python3.10/site-packages (from stack-data->ipython>=7.8.0->nbqa) (0.2.2)
Requirement already satisfied: asttokens>=2.1.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from stack-data->ipython>=7.8.0->nbqa) (2.2.1)
Requirement already satisfied: six in /usr/lib/python3/dist-packages (from asttokens>=2.1.0->stack-data->ipython>=7.8.0->nbqa) (1.16.0)
```

2. Then we have written down our markdown python code in cells. And we have also written nbqa command without running it.



```
[2]: !pip install blacken-docs
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: blacken-docs in /home/saifrehman/.local/lib/python3.10/site-packages (1.13.0)
Requirement already satisfied: black==22.1.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from blacken-docs) (23.3.0)
Requirement already satisfied: click>=8.0.0 in /usr/lib/python3/dist-packages (from black==22.1.0->blacken-docs) (8.0.3)
Requirement already satisfied: packaging>=22.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from black==22.1.0->blacken-docs) (23.0)
Requirement already satisfied: mpy-extensions>=0.4.3 in /usr/lib/python3/dist-packages (from black==22.1.0->blacken-docs) (0.4.3)
Requirement already satisfied: platformdirs>=2 in /home/saifrehman/.local/lib/python3.10/site-packages (from black==22.1.0->blacken-docs) (2.6.2)
Requirement already satisfied: pathspec>=0.9.0 in /home/saifrehman/.local/lib/python3.10/site-packages (from black==22.1.0->blacken-docs) (0.11.1)
Requirement already satisfied: toml==1.1.0 in /usr/lib/python3/dist-packages (from black==22.1.0->blacken-docs) (1.2.2)

Markdown

<h1> Assignment </h1>
<ul class=command_list>
<li> !pip install nbqa </li>
<li> !pip install blacken-docs </li>
</ul>

'''python
print (
'''
nbqa blacken-docs nbqa_assignment.ipynb --nbqa-md
```

3. We run the the cell containing nbqa command.

▼

Markdown

Assignment

- !pip install nbqa
- !pip install blacken-docs

```
print      (      "Code Eat Sleep & Repeat")
```

[6]:

!nbqa blacken-docs nbqa_assignment.ipynb --nbqa-md

nbqa_assignment.ipynb: Rewriting...

4. After running the command we can see that the code works fine.

Markdown

Assignment

- !pip install nbqa
- !pip install blacken-docs

```
print("Code Eat Sleep & Repeat")
```

[6]:

!nbqa blacken-docs nbqa_assignment.ipynb --nbqa-md