Part2 - -Que1.

Check if the sentence is Grammatically correct:

- Please use any pre-trained model or use text from open datasets.
- Once done, please evaluate the English Grammar in the text column of the below dataset.
- DataSet Link (https://drive.google.com/file/d/1LTI5KNqPrtxrYRgJk2AxI30KgYyNcRpD/view)

ImportRequiredLibraries:

```
# install language-tool-python
pip install language-tool-python
```

For more info click - language-tool-python (https://pypi.org/project/language-tool-python/).

```
In [1]: import numpy as np
import pandas as pd

import language_tool_python
tool = language_tool_python.LanguageTool('en-US') # language English-US
```

Load Data:

```
In [2]: data = pd.read_csv('data/review_data.csv', nrows=500)
    data.head(2)
```

Out[2]:

	text	Stai	арр_іц	TeviewDate
0	Anathi Khanyile	5	com.fingersoft.hillclimb	18/03/21
1	Tony bahut funny hai Hill climbing racing my f	5	com.fingersoft.hillclimb	18/03/21

text column

dtype: int64

```
In [3]: df = data[['text']]
# check missing values
df.isnull().sum()
Out[3]: text 0
```

Check – Grammatical Correct or not:

```
In [5]: # tool.check() : to generate the list of error rules matches

try:
    df = df.assign(Grammatical_Status = ['Incorrect' if len(tool.check(rows))>0 else 'Correct' for rows in df.text])
except Exception as e:
    print('Error: ', e)
```

```
In [6]: df.head()
```

Out[6]:

Grammatical_Status	text	
Incorrect	Anathi Khanyile	0
Incorrect	Tony bahut funny hai Hill climbing racing my f	1
Incorrect	Teturwu	2
Incorrect	Hooooooooooooooooooooooooooooooooooooo	3
Correct	This game is nice	4

Fix-Grammatical incorrect:

```
In [7]: # tool.correct() : to correct the error rules matches
            df = df.assign(Corrected = [tool.correct(rows) for rows in df.text])
         except Exception as e:
            print('Error: ', e)
In [8]: df.head()
Out[8]:
                                                    text Grammatical_Status
                                                                                                             Corrected
         0
                                           Anathi Khanyile
                                                                  Incorrect
                                                                                                            Anti Handle
                                                                                  Tony Beirut funny HAI Hill climbing racing my ...
                    Tony bahut funny hai Hill climbing racing my f...
          1
                                                                  Incorrect
          2
                                                 Teturwu
                                                                  Incorrect
                                                                                                               Return
          3 Hooooooooooyaaaaaaaaa what a game hooooooooo...
                                                                  This game is nice
                                                                   Correct
                                                                                                        This game is nice
```

In [9]: tool.close()