

Ques 8. Implement row transposition cipher transposition operation.

Ans:-

CSC/20/50 Bharat Sharma UNIV_ROLL_NO:- 20059570040

```
import re

def convert(pt,d):

    text=""

    for i in d:

        i=i-1

        j=0

        while (j*max(d))+i<len(pt):

            text+=pt[(j*max(d))+i]

            j+=1

    return text

def create_matrix(pt,c):

    pt=pt.replace(" ","")

    pt=pt.lower()

    pt=re.sub('[^a-zA-Z]+', '', pt)

    res = [str(sub) for sub in pt]

    print("Cypher text is :- ",convert(res,c))
```

```
plaintext=input("Enter Plain Text for Row Transposition Operation ")
```

```
key=input("Enter Key :- ")
```

```
keys = [int(i) for i in key]
```

```
matrix=create_matrix(plaintext,keys)
```

OUTPUT:-

IS_Ques8 - Jupyter Notebook

localhost:8888/notebooks/IS_Ques8.ipynb

Gmail YouTube Maps UPSC Prelims Quest... UPSC Mains (Year... Next IAS CMS Prime movies multiple charts

jupyter IS_Ques8 Last Checkpoint: a few seconds ago (autosaved)

Logout

File Edit View Insert Cell Kernel Widgets Help

Not Trusted Python 3 (ipykernel)

In [11]:

CSC/20/50 Bharat Sharma UNIV_ROLL_NO:- 20059570040
import re
def convert(pt,d):
 text=""
 for i in d:
 ii=i-1
 j=0
 while (j*max(d))+i<len(pt):
 text+=pt[(j*max(d))+i]
 j+=1
 return text
def create_matrix(pt,c):
 pt=pt.replace(" ","")
 pt=pt.lower()
 pt=re.sub('[^a-zA-Z]+',' ',pt)
 res = [str(sub) for sub in pt]
 print("Cypher text is :- ",convert(res,c))

plaintext=input("Enter Plain Text for Row Transposition Operation ")
key=input("Enter Key :- ")
keys = [int(i) for i in key]
matrix=create_matrix(plaintext,keys)

Enter Plain Text for Row Transposition Operation hellothere
Enter Key :- 43512
Cypher text is :- lrleoehteh

In [4]:

c

Out[4]:

3