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Task-6:

Question-1

File Handling is one of the basic important task when it comes to building machine learning models or neural networks. Building a good model always starts with finding datasets and processing it, for which, file handling acts as a stepping stone.

Notepad contents: (onefileline.txt)

```
1Aaa3.5Maths2Bbb4.2Physics3Ccc7.62Chemistry4Ddd9.55Biology5Eee4.0Social6Fff7.6English7Ggg3.111Maths8Hhh9.99Physics9Iii1.23Civics
```

OUTPUT:

```
===== RESTART: C:/Users/P Havirbhavi/OneDrive/Desktop/1.py =====
1,Aaa,3.5,Maths
2,Bbb,4.2,Physics
3,Ccc,7.62,Chemistry
4,Ddd,9.55,Biology
5,Eee,4.0,Social
6,Fff,7.6,English
7,Ggg,3.111,Maths
8,Hhh,9.99,Physics
9,Iii,1.23,Civics
```

Question-2

Data formatting

Python libraries represent missing numbers as nan which is short for "not a number". Most libraries (including scikit-learn) will give you an error if you try to build a model using data with missing values. One of the common solution to get around this issue is to impute or fill in the missing value with a number or value of same format. From the given dataset, find the missing values (Nan/NA/-/Nil) and change those values into an appropriate number.

Output:

===== RESTART: C:/Users/P Havirbhavi/OneDrive/Desktop/Task6-2.i

```
0      False
1      False
2      False
3      False
4      False
...
94     False
95      True
96     False
97     False
98     False
Name: LotFrontage, Length: 99, dtype: bool
Id      0
MSSubClass  0
MSZoning  0
LotFrontage  14
LotArea  0
Street  0
Alley  93
LotShape  0
LandContour  0
Utilities  0
LotConfig  0
LandSlope  0
Neighborhood  0
Condition1  0
Condition2  0
BldgType  0
HouseStyle  0
OverallQual  0
OverallCond  0
YearBuilt  0
YearRemodAdd  0
RoofStyle  0
RoofMatl  0
Exterior1st  0
Exterior2nd  0
MasVnrType  0
MasVnrArea  0
ExterQual  0
ExterCond  0
Foundation  0
BsmtQual  3
```

```
BsmtFinSF1      0
BsmtFinType2    3
dtype: int64
0      65.0
1      80.0
2      68.0
3      60.0
4      84.0
...
94     69.0
95      1.0
96     78.0
97     73.0
98     85.0
Name: LotFrontage, Length: 99, dtype: float64
0      True
1      True
2      True
3      True
4      True
...
94     True
95     True
96     True
97     True
98     True
Name: Alley, Length: 99, dtype: bool
0      no alley here
1      no alley here
2      no alley here
3      no alley here
4      no alley here
...
94      no alley here
95      no alley here
96      no alley here
97      no alley here
98      no alley here
Name: Alley, Length: 99, dtype: object
0      False
1      False
2      False
3      False
4      False
...
94     False
95     False
```

```
3      no alley here
4      no alley here
...
94     no alley here
95     no alley here
96     no alley here
97     no alley here
98     no alley here
Name: Alley, Length: 99, dtype: object
0      False
1      False
2      False
3      False
4      False
...
94     False
95     False
96     False
97     False
98     False
Name: BsmtQual, Length: 99, dtype: bool
0      False
1      False
2      False
3      False
4      False
...
94     False
95     False
96     False
97     False
98     False
Name: BsmtCond, Length: 99, dtype: bool
0      False
1      False
2      False
3      False
4      False
...
94     False
95     False
96     False
97     False
98     False
Name: BsmtExposure, Length: 99, dtype: bool
0      False
1      False
```

```

0      False
1      False
2      False
3      False
4      False
...
94     False
95     False
96     False
97     False
98     False
Name: BsmtFinType2, Length: 99, dtype: bool
Id      0
MSSubClass  0
MSZoning  0
LotFrontage  0
LotArea  0
Street  0
Alley  0
LotShape  0
LandContour  0
Utilities  0
LotConfig  0
LandSlope  0
Neighborhood  0
Condition1  0
Condition2  0
BldgType  0
HouseStyle  0
OverallQual  0
OverallCond  0
YearBuilt  0
YearRemodAdd  0
RoofStyle  0
RoofMatl  0
Exterior1st  0
Exterior2nd  0
MasVnrType  0
MasVnrArea  0
ExterQual  0
ExterCond  0
Foundation  0
BsmtQual  0
BsmtCond  0
BsmtExposure  0
BsmtFinType1  0
BsmtFinSF1  0
ExterCond  0
Foundation  0
BsmtQual  0
BsmtCond  0
BsmtExposure  0
BsmtFinType1  0
BsmtFinSF1  0
BsmtFinType2  0
dtype: int64

```

Question-3

Read the file 'about.txt' and find the words with atleast 6 letters and the most frequently used word.

Notepad Contents : (about.txt):

Python has tools for almost every aspect of scientific computing. The Bank of America uses Python to crunch its financial data and Facebook looks upon the Python library Pandas for its data analysis. While there are many libraries available to perform data analysis in Python, here are a few: NumPy, SciPy, Pandas and Matplotlib.

OUTPUT:

```
===== RESTART: C:/Users/P Havirbhavi/OneDrive/Desktop/3.py =====  
Most frequently used word is : python  
|
```