

**ASHUTOSH P**  
**CH.EN.U4CSE20007**

## **COGNIZANCE TASK - 6.**

**Question - 1:** Write a python program that reads the contents from the given file 'onlinefile.txt'. Split the contents of the given file based on their format and write it into a .csv file say 'Filename2.csv'.

**File name:** Task6q1.py

### **Output:**

```
===== RESTART: C:\Amrita\Cognizance\Task6q1.py =====  
Contents of the file:  
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:** From the given dataset, find the missing values(Nan/NA/-/Nil) and change those values into an appropriate number.

**File name:** Task6q2.py

**Output:**

```
===== RESTART: C:\Amrita\Cognizance\Task6q2.py =====
```

```
Missing values in the csv file:
```

```
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
BsmtCond          3
BsmtExposure      3
BsmtFinType1      3
BsmtFinSF1        0
BsmtFinType2      3
dtype: int64
```

```
Missing values in LotFrontage:
```

```
0    False
1    False
2    False
3    False
```

```
2      False
3      False
4      False
...
94     False
95      True
96     False
97     False
98     False
Name: LotFrontage, Length: 99, dtype: bool
```

updated LotFrontage values(changed to '-1' for LotFrontage instead of NA):

```
0      65.0
1      80.0
2      68.0
3      60.0
4      84.0
...
94     69.0
95      -1
96     78.0
97     73.0
98     85.0
Name: LotFrontage, Length: 99, dtype: object
```

Missing values in Alley:

```
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
```

updated Alley values(changed to 'empty' for Alley instead of NA):

```
0      empty_Alley
1      empty_Alley
2      empty_Alley
3      empty_Alley
```

```
2     empty_Alley
3     empty_Alley
4     empty_Alley
...
94     empty_Alley
95     empty_Alley
96     empty_Alley
97     empty_Alley
98     empty_Alley
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
```

updated BsmtQual values(changed to 'empty' for BsmtQual instead of NA):

```
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: BsmtQual, Length: 99, dtype: bool
```

updated BsmtCond values(changed to 'empty' for BsmtCond instead of NA):

```
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
```

updated BsmtExposure values(changed to 'empty' for BsmtExposure instead of NA):

```
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
2      False
3      False
4      False
...
94     False
95     False
96     False
97     False
98     False
Name: BsmtFinType1, Length: 99, dtype: bool
```

updated BsmtFinType1 values(changed to 'empty' for BsmtFinType1 instead of NA):

```
0      False
1      False
2      False
3      False
4      False
...
94     False
95     False
96     False
97     False
98     False
Name: BsmtFinType1, 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: BsmtFinType2, Length: 99, dtype: bool
```

updated BsmtFinType2 values(changed to 'empty' for BsmtFinType2 instead of NA):

```
0      False
1      False
2      False
3      False
```

```
95     False
96     False
97     False
98     False
Name: BsmtFinType2, Length: 99, dtype: bool
```

Updated csv file:

```
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
BsmtFinType2     0
dtype: int64
```

**Question - 3:** Read the file 'about.txt' and find the words with at least 6 letters and the most frequently used word.

**File name:** Task6q3.py

**Output:**

```
===== RESTART: C:\Amrita\Cognizance\Task6q3.py =====  
Python  
almost  
aspect  
scientific  
computing  
America  
Python  
crunch  
financial  
Facebook  
Python  
library  
Pandas  
analysis  
libraries  
available  
perform  
analysis  
Python  
Pandas  
Matplotlib  
  
Most repeated word over 6 letters long: python  
,
```