ML 11 - Target Guided Ordinal Encoding By Virat Tiwari

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1 Target Guided Ordinal Encoding

[1]:
```
# Here we import pandas for making dataset

import pandas as pd
```

[6]:
```
# We create a dataset with a categorical and target variable
# In this dataset we have two features city and price

df=pd.DataFrame({
    "city":["New York","London","Paris","Tokyo","New York","Paris"],
    "price":[200,150,300,250,150,320]
})
```

[7]:
```
# This is our dataset

df
```

[7]:

	city	price
0	New York	200
1	London	150
2	Paris	300
3	Tokyo	250
4	New York	150
5	Paris	320

[12]:
```
# Calculate the mean price of each city
# groupby ( ) function is used for creating a city and price in group

mean_price=df.groupby("city")["price"].mean().to_dict()
mean_price
```

[12]:
```
{'London': 150.0, 'New York': 175.0, 'Paris': 310.0, 'Tokyo': 250.0}
```

Note 1 - We will take the MEAN becouse there is no outliers

Note 2 - We will Take the MEDIAN if there is outliers

[13]:
```
# Replace each city with its mean
# This is final step in which we have to seen that how our city converted into␣
 ↪the numerical values

df["city_encoded"]=df["city"].map(mean_price)
```

[14]:
```
df
```

[14]:

	city	price	city_encoded
0	New York	200	175.0
1	London	150	150.0
2	Paris	300	310.0
3	Tokyo	250	250.0
4	New York	150	175.0
5	Paris	320	310.0

THANK YOU SO MUCH !!

YOURS VIRAT TIWARI :)