SQL-Python Karşılıkları

Center for Applied Data Science @TEDU

	product_name	price	owner
0	pencil	2	Chi
1	eraser	1	Joe
2	pen	1	Dan
3	desk	50	Lisa
4	laptop	678	Rose

	class	teacher	owner
0	A	Mona	Chi
1	A	Mila	Joe
2	C	Laurel	Dan
3	B	Wes	Lisa
4	E	Connor	Rose

SELECT

SQL	Pandas
Select * from df	df
Select owner from df	df[['owner']] df.iloc[: ,2] df.loc[: ,['owner']]
Select * from df limit 2	df.head(2)
Select distinct product_name from df	df.product_name.unique()

KOŞULLU SELECT

SQL	Pandas
Select * from df where product_name = "pen"	df[df['product_name'] == 'pen'] df.loc[df['product_name']== 'pen'] df.query('product_name == "pen"') df[df.apply(lambda x: x['product_name'] == 'pen', axis=1)]
Select * from df where product_name = "pen" and price = 2	df[(df['product_name'] == 'pen') & (df['price']==2)] df.loc[(df['product_name']== 'pen') & (df['price'] == 2)] df.query('product_name == "pen" and price ==2') df[df.apply(lambda x: x['product_name'] == 'pen' and x['price'] == 2, axis=1)]
Select owner, product name from df where product_name = "pen"	df[df['product_name'] == 'pen'][['owner','product_name']] df.loc[df['product_name']== 'pen', ['owner','product_name']]

HESAPLAMA FONKSİYONLARI

SQL	Pandas
Select count(product_name) from df	df['product_name'].count()
Select sum(price) from df	df['product_name'].sum()
Select min(price) from df	df['product_name'].min()
Select max(price) from df	df['product_name'].max()
Select count(price), count(distinct price), sum(price), min(price), max(price) from df	df.agg({'price': ['count','nunique','sum','min', 'max']})

GRUPLAMA FONKSİYONLARI

SQL	Pandas
Select owner, sum(price) from df group by sum(price)	df.groupby('owner').agg({'price':'sum'}).reset_index()
Select owner, product_name, sum(price) from df group by owner, product_name	df.groupby(['owner','product_name']).agg({'price':'sum'}).reset_index()

VERİ SETİ BİRLEŞTİRME FONKSİYONLARI

SQL	Pandas
Select df.owner, product_name, class, teacher from df left join df2 on df.owner = df2.owner	pd.merge(df[['owner','product_name']], df2, how="left", on=["owner"])
Select df2.*, product_name, price from df right join df2 on df.owner = df2.owner	pd.merge(df, df2, how="right", on=["owner"])
Select df2.*, product_name from df inner join df2 on df.owner = df2.owner	pd.merge(df[['product_name','owner']], df2, how="inner", on=["owner"])
Select df2.*, product_name from df outer join df2 on df.owner = df2.owner	pd.merge(df[['product_name','owner']], df2, how="outer", on=["owner"])