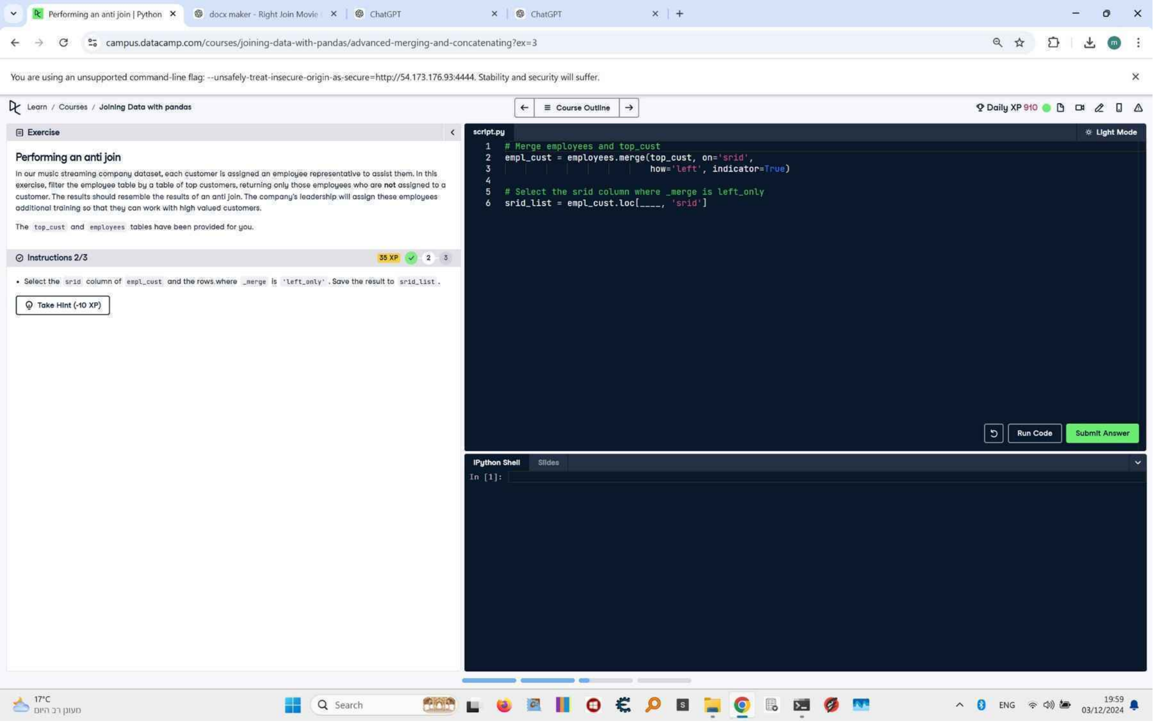
Filtering Rows in an Anti Join in Pandas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Performing an anti join

In our music streaming company dataset, each customer is assigned an employee representative to assist them. In this exercise, filter the employee table by a table of top customers, returning only those employees who are **not** assigned to a customer. The results should resemble the results of an anti join. The company's leadership will assign these employees additional training so that they can work with high valued customers.

The `top_cust` and `employees` tables have been provided for you.

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- Select the `srid` column of `empl_cust` and the rows where `_merge` is `'left_only'`. Save the result to `srid_list`.

Take Hint (-10 XP)

```
# Merge employees and top_cust
empl_cust = employees.merge(top_cust, on='srid',
                            how='left', indicator=True)

# Select the srid column where _merge is left_only
srid_list = empl_cust.loc[____, 'srid']
```

Screenshot showing the exercise context for filtering rows in an anti join in pandas.

Code Answer:

Merge employees and top_cust with a left join, setting indicator to True
empl_cust = employees.merge(top_cust, on='srid', how='left', indicator=True)

Select the srid column where _merge is left_only
srid_list = empl_cust.loc[empl_cust['_merge'] == 'left_only', 'srid']

Explanation:

1. The `merge` function combines the 'employees' table and 'top_cust' table based on the 'srid' column. The `how='left'` parameter ensures that all rows from the 'employees' table are included, and the `indicator=True` parameter creates a new column, '_merge', indicating the source of each row.

2. The `loc` method is used to filter rows where the '_merge' column has the value 'left_only', which means these rows exist only in the 'employees' table and not in the 'top_cust' table.

3. The 'srid' column from these filtered rows is selected, resulting in a list of 'srid' values representing employees who are not assigned to any top customer.