**SQL ASSESSMENT**

**--> Question 2.1 What are the Top 25 schools (.edu domains)?**

**Ans:**

SELECT

email\_domain,

COUNT(\*)

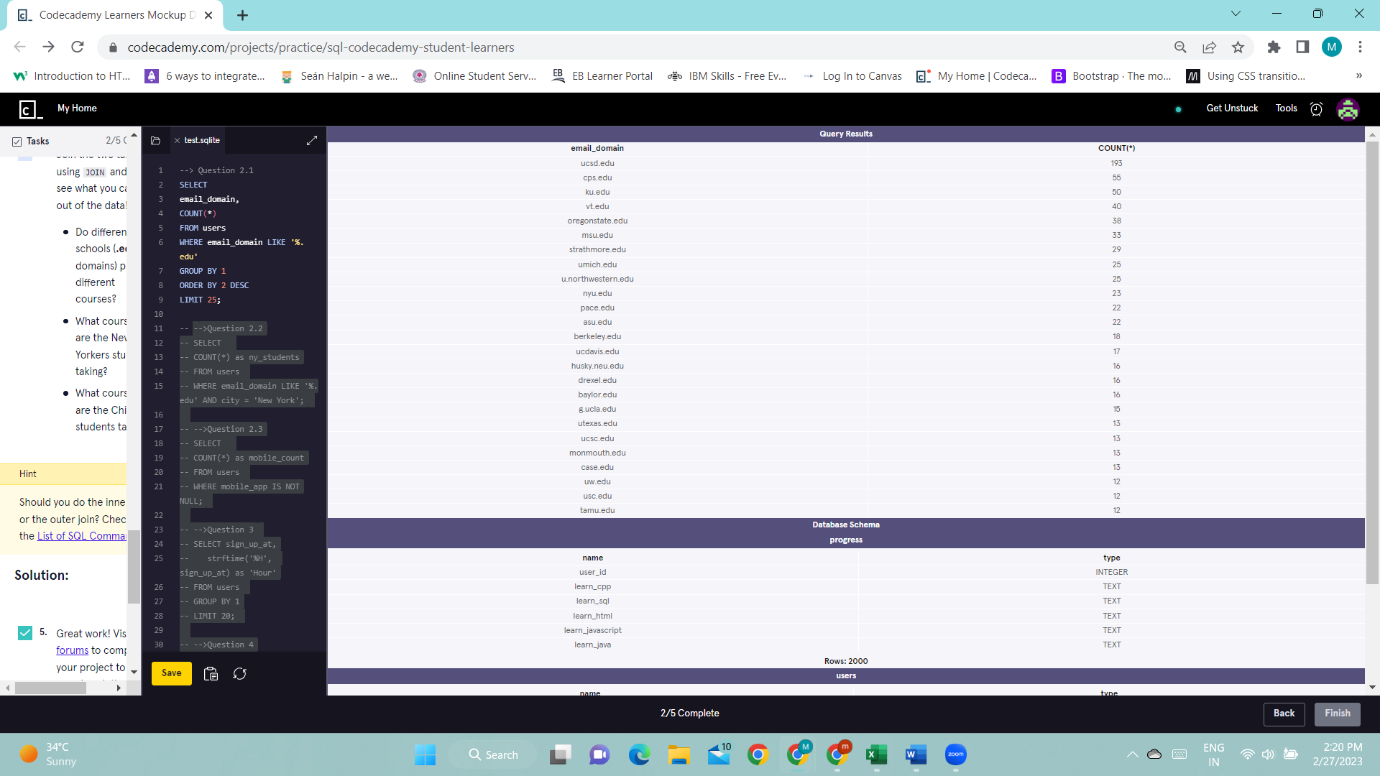
FROM users

WHERE email\_domain LIKE '%.edu'

GROUP BY 1

ORDER BY 2 DESC

LIMIT 25;



**-->Question 2.2 How many .edu learners are located in New York?**

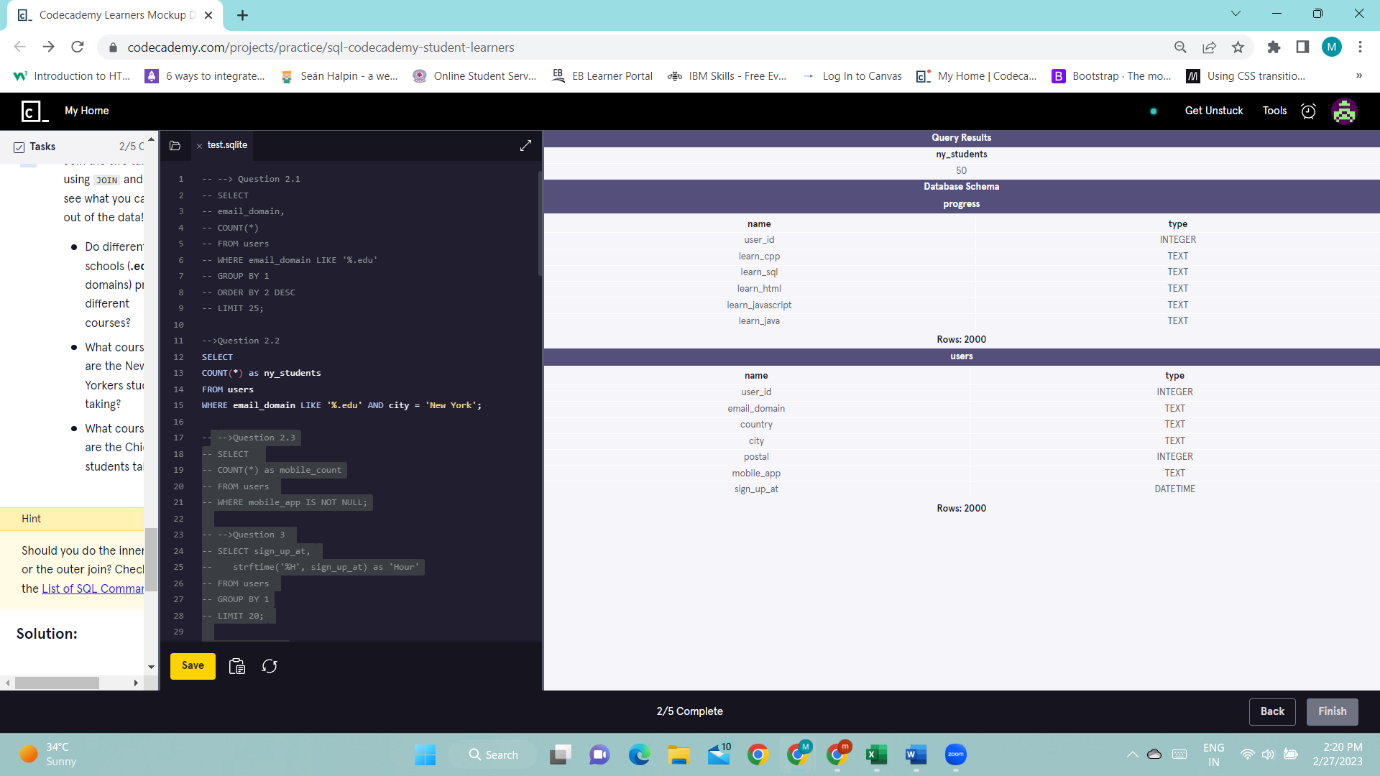
**Ans:**

SELECT

COUNT(\*) as ny\_students

FROM users

WHERE email\_domain LIKE '%.edu' AND city = 'New York';

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**-->Question 2.3 The mobile\_app column contains either mobile-user or NULL. How many of these Codecademy learners are using the mobile app?**

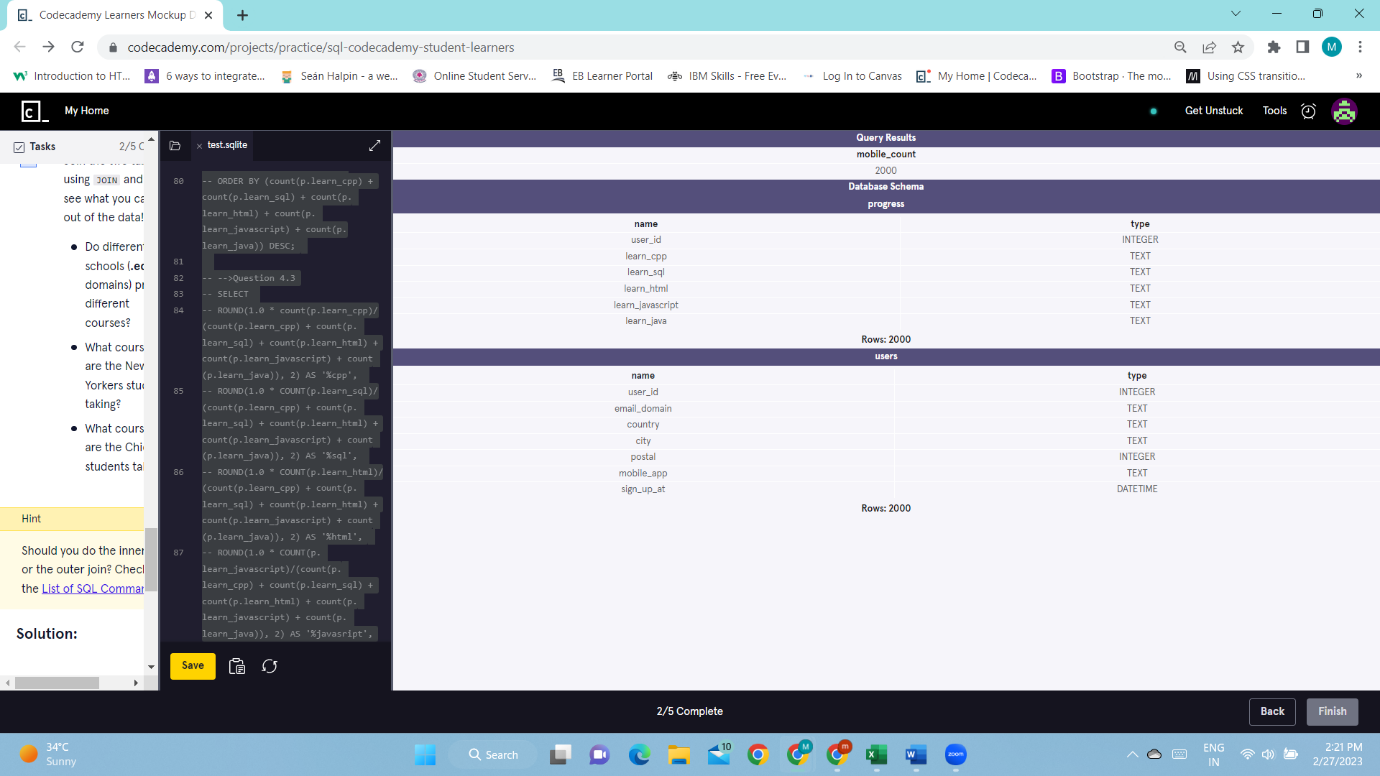
**Ans:**

SELECT

COUNT(\*) as mobile\_count

FROM users

WHERE mobile\_app IS NOT NULL;



**-->Question 3**

**The data type of the sign\_up\_at column is DATETIME. It is for storing a date/time value in the database.**

**Notice that the values are formatted like:**

**2015-01-01 18:33:52**

**So the format is:**

**YYYY-MM-DD HH:MM:SS**

**SQLite comes with a strftime() function - a very powerful function that allows you to return a formatted date.**

**It takes two arguments:strftime(format, column)**

**Let’s test this function out:**

**SELECT sign\_up\_at,**

**strftime('%S', sign\_up\_at)**

**FROM users**

**GROUP BY 1**

**LIMIT 20;Now, using this function, query for the sign up counts for each hour.**

**Ans:**

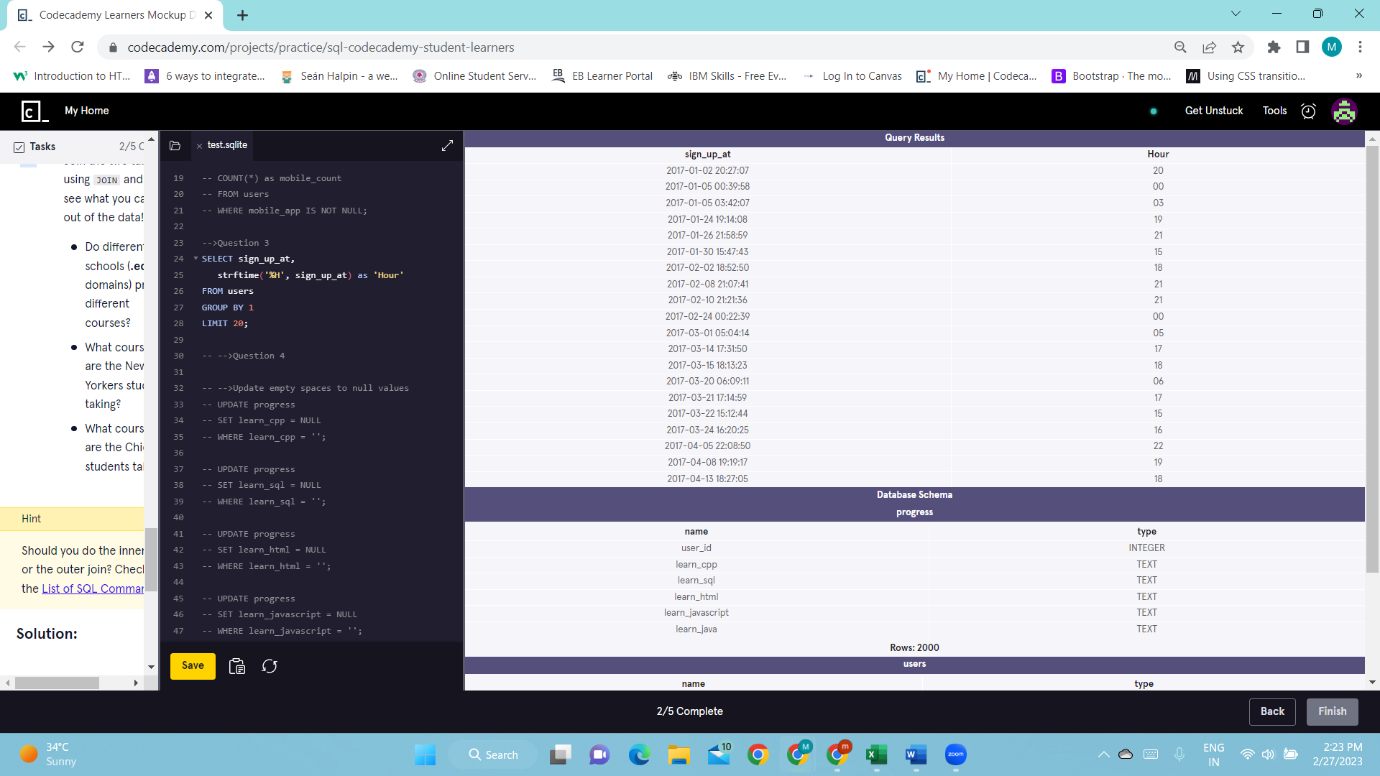
SELECT sign\_up\_at,

strftime('%H', sign\_up\_at) as 'Hour'

FROM users

GROUP BY 1

LIMIT 20;



**-->Question 4 Join the two tables using JOIN and then see what you can dig out of the data!**

**Ans:**

-->Update empty spaces to null values

UPDATE progress

SET learn\_cpp = NULL

WHERE learn\_cpp = '';

UPDATE progress

SET learn\_sql = NULL

WHERE learn\_sql = '';

UPDATE progress

SET learn\_html = NULL

WHERE learn\_html = '';

UPDATE progress

SET learn\_javascript = NULL

WHERE learn\_javascript = '';

UPDATE progress

SET learn\_java = NULL

WHERE learn\_java = '';

**-->Question 4.1 Do different schools (.edu domains) prefer different courses?**

**Ans:**

SELECT

email\_domain,

ROUND(1.0 \* count(p.learn\_cpp)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%cpp',

ROUND(1.0 \* COUNT(p.learn\_sql)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%sql',

ROUND(1.0 \* COUNT(p.learn\_html)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%html',

ROUND(1.0 \* COUNT(p.learn\_javascript)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%javasript',

ROUND(1.0 \* COUNT(p.learn\_java)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%java'

FROM users u

JOIN progress p

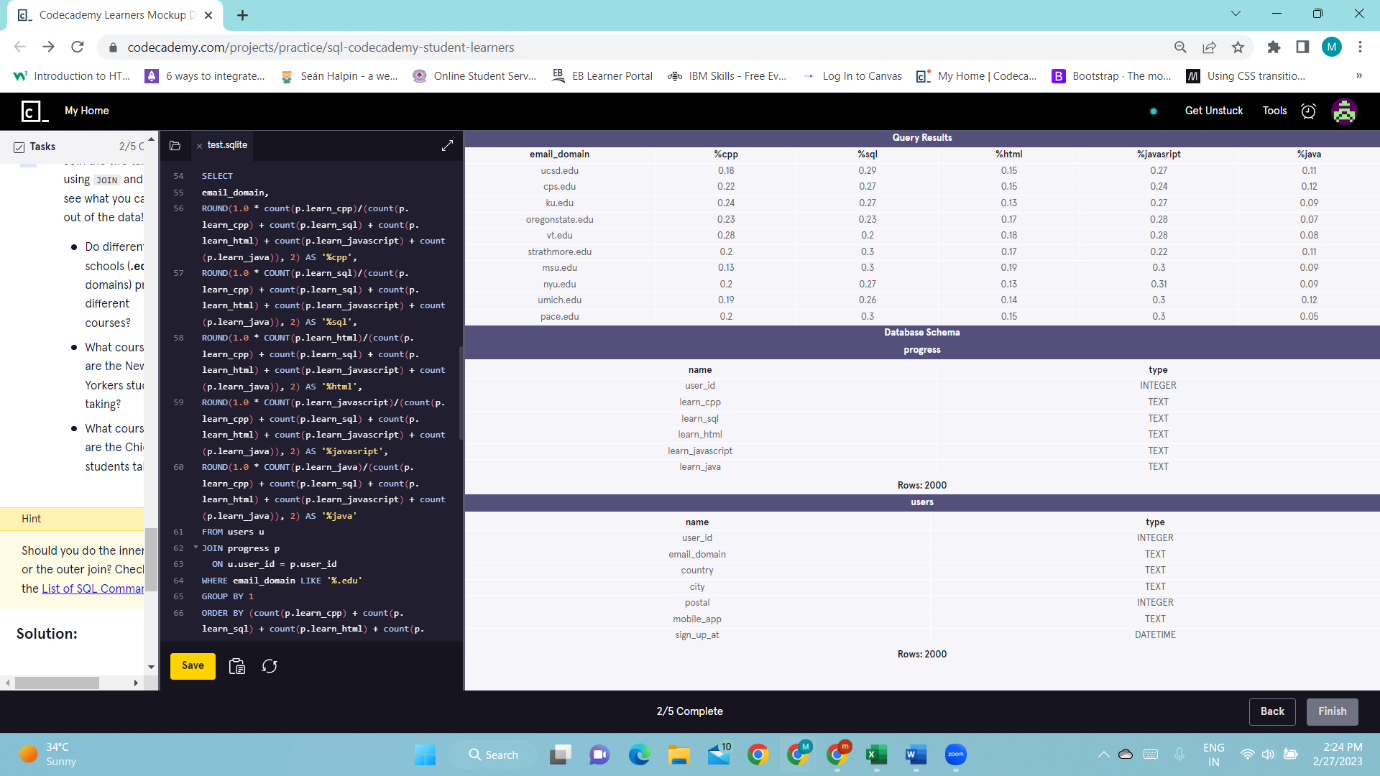
ON u.user\_id = p.user\_id

WHERE email\_domain LIKE '%.edu'

GROUP BY 1

ORDER BY (count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)) DESC

LIMIT 10;



**--Question 4.2 What courses are the New Yorkers students taking?**

**Ans:**

SELECT

ROUND(1.0 \* count(p.learn\_cpp)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%cpp',

ROUND(1.0 \* COUNT(p.learn\_sql)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%sql',

ROUND(1.0 \* COUNT(p.learn\_html)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%html',

ROUND(1.0 \* COUNT(p.learn\_javascript)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%javasript',

ROUND(1.0 \* COUNT(p.learn\_java)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%java'

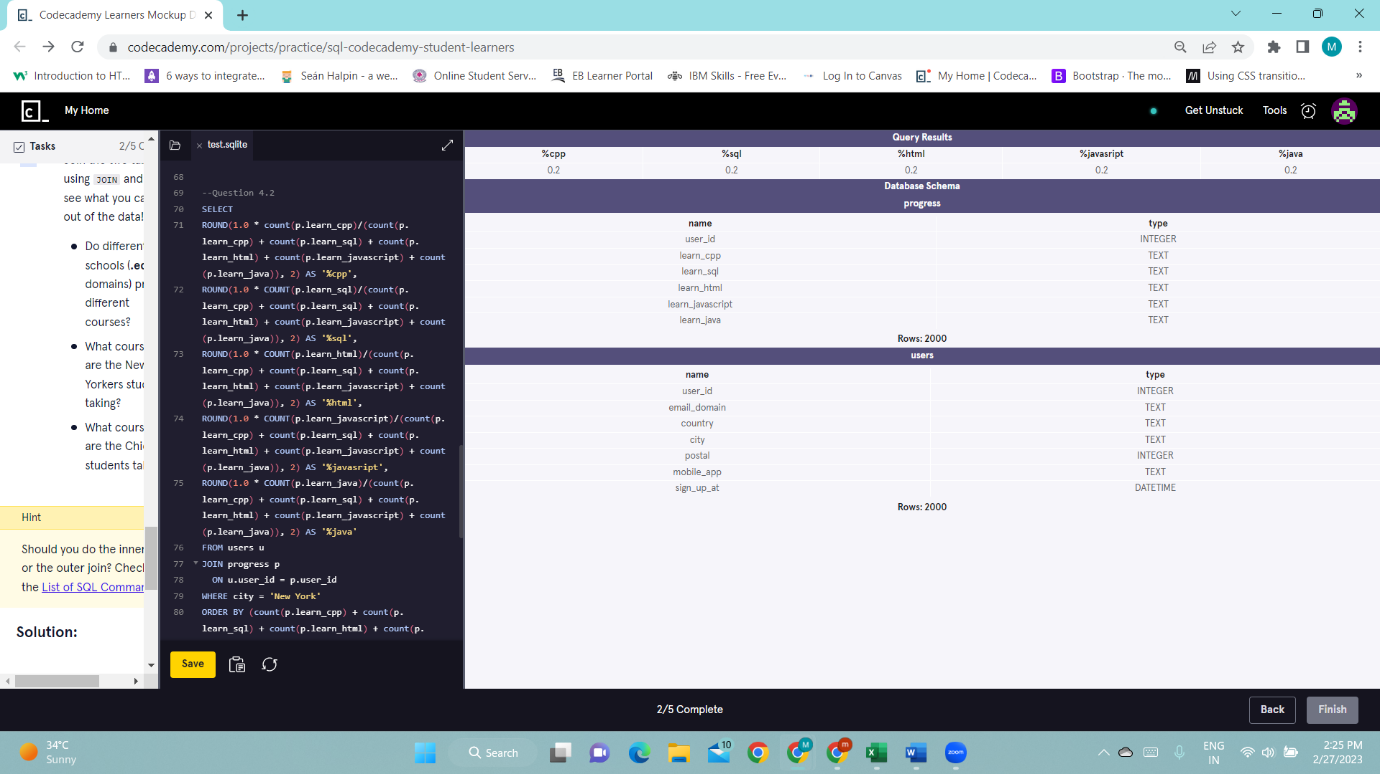
FROM users u

JOIN progress p

ON u.user\_id = p.user\_id

WHERE city = 'New York'

ORDER BY (count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)) DESC;



**-->Question 4.3 What courses are the Chicago students taking?**

**Ans:**

SELECT

ROUND(1.0 \* count(p.learn\_cpp)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%cpp',

ROUND(1.0 \* COUNT(p.learn\_sql)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%sql',

ROUND(1.0 \* COUNT(p.learn\_html)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%html',

ROUND(1.0 \* COUNT(p.learn\_javascript)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%javasript',

ROUND(1.0 \* COUNT(p.learn\_java)/(count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)), 2) AS '%java'

FROM users u

JOIN progress p

ON u.user\_id = p.user\_id

WHERE city = 'New York'

ORDER BY (count(p.learn\_cpp) + count(p.learn\_sql) + count(p.learn\_html) + count(p.learn\_javascript) + count(p.learn\_java)) DESC;

