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-- Lab 4 Report
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-- I scrapped some of the questions (Thankfully I had more than 10) because they
are impossible
-- to do without altering the tables

-- Lookup kanji by its meaning in English
-- Example meaning eat

SELECT Character
FROM Kanji
WHERE Unicode = (SELECT KanjiId
                  FROM KanjiMeaning
                  WHERE KanjiMeaning.MeaningId = (SELECT Id
                                                  FROM Meaning
                                                  WHERE Meaning.Meanings = 'eat'
                                                  )
                  );

-- This selects a character by referencing the Kanji in the KanjiMeaning table
that have the
-- MeaningId that corresponds to the inputted meaning VARCHAR.

-- Lookup kanji(s) by its pronunciation (Onyomi / Kunyomi)
-- Example pronunciation hito

-- Kunyomi:
SELECT Character
FROM Kanji
WHERE Unicode = (SELECT KanjiId
                  FROM KanjiKunyomi
                  WHERE KanjiKunyomi.KunyomiId = (SELECT Id
                                                  FROM Kunyomi
                                                  WHERE Kunyomi.Romaji = 'hito' OR
Kunyomi.Hiragana = 'hito' OR Kunyomi.Katakana = 'hito'
                                                  )
                  );

-- This selects a character by referencing the Kanji in the KanjiKunyomi table
that have the
-- KunyomiId that corresponds to the inputted Kunyomi VARCHAR's (Either Romaji,
Hiragana, or Katakana).

-- Onyomi:

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SELECT Character
FROM Kanji
WHERE Unicode = (SELECT KanjiId
                  FROM KanjiOnyomi
                  WHERE KanjiOnyomi.OnyomiId = (SELECT Id
                                                FROM Onyomi
                                                WHERE Onyomi.Romaji = 'hito' OR
Onyomi.Hiragana = 'hito' OR Onyomi.Katakana = 'hito'
                                                )
                  );

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-- This selects a character by referencing the Kanji in the KanjiOnyomi table that have the
 -- OnyomiId that corresponds to the inputted Onyomi VARCHAR's (Either Romaji, Hiragana, or Katakana).

-- Lookup kanji by the number of strokes
 -- Example stroke 7

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SELECT Character
FROM Kanji
WHERE StrokeId = (SELECT Id
                  FROM Stroke
                  WHERE Stroke.Number = 7
                  );

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-- Selects a Character from a Kanji by referencing the StrokeId that goes to the Stroke table with the inputted Stroke Number.

-- Lookup kanji by its level for the JLPT (N5 - N1)
 -- Example level N5

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SELECT Character
FROM Kanji
WHERE JlptLevel = 'N5';

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-- This Selects the Kanji's that have the inputted JlptLevel as JlptLevel is within the Kanji table.

-- What is a kanjis pronunciation (Onyomi / Kunyomi)
 -- All of the next queries will have 人 as an example

-- You can replace Romaji with Hiragana or Katakana to get the pronunciation in those scripts

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-- Onyomi:
SELECT Romaji
FROM Onyomi

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WHERE Onyomi.Id = (SELECT OnyomiId
                   FROM KanjiOnyomi
                   WHERE KanjiOnyomi.KanjiId = (SELECT Unicode
                                                FROM Kanji
                                                WHERE Kanji.Character = '人'
                                                )
                   );

-- This selects a pronunciation by referencing the Id of an Onyomi entry and
taking the Onyomi table's
-- KanjiId leading us to the Kanji table and referencing the Kanji Character
given.

-- Kunyomi:
SELECT Romaji
FROM Kunyomi
WHERE Kunyomi.Id = (SELECT KunyomiId
                   FROM KanjiKunyomi
                   WHERE KanjiKunyomi.KanjiId = (SELECT Unicode
                                                FROM Kanji
                                                WHERE Kanji.Character = '人'
                                                )
                   );

-- This selects a pronunciation by referencing the Id of an Kunyomi entry and
taking the Kunyomi table's
-- KanjiId leading us to the Kanji table and referencing the Kanji Character
given.

-- What are a kanjis meaning

SELECT Means
FROM Meaning
WHERE Meaning.Id = (SELECT MeaningId
                   FROM KanjiMeaning
                   WHERE KanjiMeaning.KanjiId = (SELECT Unicode
                                                FROM Kanji
                                                WHERE Kanji.Character = '人'
                                                )
                   );

-- This selects a Meaning (Meaning.Means) by referencing the Id of an Meaning
entry and taking the KanjiMeaning table's
-- KanjiId leading us to the Kanji table and referencing the Kanji Character
given.

-- How many strokes a kanji has

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SELECT Number
FROM Stroke
WHERE Stroke.Id = (SELECT StrokeId
                    From Kanji
                    WHERE Kanji.Character = '人'
                    );
-- This gives the Number of Strokes by using the Stroke Id and matching it with
the StrokeId in the Kanji table
-- based off of what kanji you give.

-- What parts or radicals a kanji is made up of

SELECT RadicalKanji
FROM AreMadeOfKanji
WHERE AreMadeOfKanji.LargeKanji = (SELECT Unicode
                                    FROM Kanji
                                    WHERE Kanji.Character = '人'
                                    );
-- This gives the Radical Kanji by using the AreMadeOfKanji relation and matching
the LargeKanji with the given Kanji in the
-- subquery and selecting the RadicalKanji associated.

-- What is an example of the kanji in a sentence

SELECT Sentence
FROM Examples
WHERE Examples.Id = (SELECT ExampleId
                     FROM KanjiExamples
                     WHERE KanjiExamples.KanjiId = (SELECT Unicode
                                                       From Kanji
                                                       WHERE Kanji.Character = '人'
                                                       )
                     );
-- This selects an Example Sentence by referencing the Id of the Examples table
tied to the Sentence going to the
-- KanjiExamples table which has the Id of the Kanji we inpputed to get an
example.

```