2. Monarchs of Hungary

In the history of our country the institution of monarchy lasted for approximately one thousand years. The database contains the data of the kings of Hungary and you have to work with it in the following exercises.

The database contains the following tables:

Tables:

monarchs (*id, mname, commonname, born, died, dyn_id*)

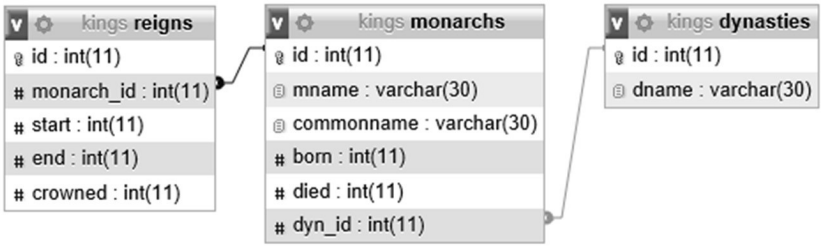
id	The identifier of the monarch (number), primary key
mname	The name of the monarch as a ruler (text)
commonname	The acquired, unofficial common name of the monarch (text), if the monarch did not have one, then blank
born	The year of birth of the monarch (number)
died	The year of death of the monarch (number)
dyn_id	The identifier of the dynasty the monarch belongs to (number), foreign key

reigns (*id, monarch_id, start, end, crowned*)

id	The identifier of the reign of the monarch (number), primary key
monarch_id	The identifier of the monarch (number), foreign key
start	The start of the reign (number)
end	The end of the reign (number)
crowned	The year in which the monarch was crowned (number), if the monarch was not crowned, then blank

dynasties (*id*, *dname*)

id	The identifier of the dynasty (number), primary key
dname	The name of the dynasty (text)



Save the SQL commands that solve the following exercises in text files with the name given at the end of the exercises and extension `.sql`. For example, save the solution of Exercise 2 in file `2names.sql`. During evaluation only the contents of these files are evaluated. Pay attention to displaying exactly the required fields in the queries, do not display unnecessary fields.

1. File `kingsource.sql` contains the SQL commands required for creating the database and the data tables and for inserting the data into the tables. Run file `kingsource.sql` on the SQL server. (The "No database selected" message does not affect the successful data import.)
2. Using a query, display the name and the common name of rulers who have a common name in the chronological order of their birth. (***2names***)

3. Create a query that lists the members of the House of Árpád, the start and the end of their reigns in the chronological order of their reigns. If a monarch reigned several times, then they should be displayed several times in the list. (***3arpad***)
4. Using a query, list the names of the monarchs who started their reign before they were crowned. (***4early***)
5. Using a query, determine how many monarchs reigned in Hungary from 1601 to 1700. Take into account monarchs whose reign was only partly in this period as well. You may use the fact that in this period each monarch reigned only once. (***517th***)
6. Create a query that determines who had the longest uninterrupted reign and the length of the reign. An example for calculating the length of a reign: Stephen I reigned from 1000 to 1038, so for 39 years. (***6long***)
7. Using a query, list the names of monarchs whose reign started when they were still younger than 15 years old and their age at the start of their reign. Display the data in increasing order by their age. (***7young***)
8. In the course of history it occurred that a monarch reigned in several periods. Create a query that determines the names of the monarchs and the total length of their reigns who reigned several times. (***8severaltimes***)
9. Create a query that determines the number of the monarchs of Hungary who belonged to the individual houses. The list should be in decreasing order by the number of monarchs. Pay attention to taking the monarchs who reigned several times into account only once in the counting. (***9houses***)

35 marks