Assignment 3

Q1

- **Create a table with two columns: FirstName, Father.**

    - **Insert the data of your family members (at least 5 members): you, your father, grandfather, uncle, siblings and cousins**

    - **Write a query to retrieve the first names of your family members and their place in the family hierarchy, starting at your grandfather with level 1.**

Q2

The following dataset contains the monthly avg temperature in Egypt in the last 100 years, We want to create a line chart to visualize how the temperature has changed over the years, however, the current table structure is not suitable for visualization, derive a new table that can be used to create a line chart with two columns, Date and Temperature.

- o **Before**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1901	12.46	16.38	18.93	22.66	24.99	28.37	29.08	28.82	26.72	23.91	18.24	14.83
1902	12.43	15.96	17.45	22.06	25.69	27.49	28.47	28.46	27.34	24.06	17.88	13.49
1903	11.71	12.94	16.91	22	25.88	27.46	27.79	28.18	25.71	22.64	17.34	14.31
1904	12.48	14.94	17.61	21.08	24.92	27.34	28.31	28.39	26.31	24.53	17.08	12.63
1905	11.38	11.96	16	21.82	26.1	28.36	29.41	28.96	27.41	25.07	20.16	13.36
1906	12.58	14.58	18.01	22.35	25.59	28.99	29.3	29.1	26.3	24.16	19.11	15.72
1907	13.19	14.6	15.89	21.4	25.61	28.05	28.79	28.72	26.28	23.46	17.77	14.61
1908	13.1	14.41	18.08	22.61	26.33	28.41	28.44	28.39	26.64	24.07	17.8	13.14
1909	12.82	14.73	19.76	21.01	28.21	29.21	29.76	29.52	27.53	24.39	19.74	15.91
1910	12.59	14.91	15.4	23.32	26.2	28.11	29.28	29.22	27.17	22.87	18.04	13.45
1911	12.68	12.65	16.86	21.84	26.1	28.05	28.97	28.7	26.48	24.12	19.08	14.37
1912	12.42	15.34	17.7	22.1	25.03	27.84	28.43	28.16	26.75	23.93	18.71	13.84
1913	13	13.91	16.55	22.59	24.98	27.32	28.74	28.49	27.42	24.19	17.74	13.44
1914	13.23	14.54	19.02	20.44	26.37	28.71	29.05	29.59	27.09	23.53	19.42	14.92

- o **After**

Temperature	Date
12.46	Jan 1901
16.38	Feb 1901
18.93	Mar 1901
22.66	Apr 1901
24.99	May 1901
28.37	Jun 1901
29.08	Jul 1901
28.82	Aug 1901
26.72	Sep 1901