CS405 Assignment 1 Report

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Methodology

Manually convert the selected data point shown in figure 1 into a list of lists to easily interpret with JavaScript. Write a helper function to create SVG to visualize in the DOM. Choose a width of 850 and a height of 500 for the SVG in order to visualize it properly in the browser. Break down the elements into categories.

1. X and Y axis of the chart: <line> SVG elements
2. Chart bars: <rect> SVG elements with a width of 20px
3. Chart value labels: <text> SVG elements with a transform property of 270 degrees
4. X and Y axis labels: <text> SVG elements
5. Legend labels: Adjacent <rect> and <text> SVG elements

Create Y axis values ranging from 0 to 10000 with a step of 1000. For each year in the data, create a <text> element in the X axis, calculating the position according to the index of the year. For each pair of datapoints in the data, first calculate the male bar size and position and create a red <rect> element, then calculate the female bar size and position and create a blue <rect> element. The resulting chart can be seen in figure 2.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	**İl ve cinsiyete göre bebek ölümleri, 2009-2022**															
2	Infant deaths by province and sex, 2009-2022															
3	**[İkametgah yerine göre**-By the place of usual residence]															
4		**Cinsiyet**	**Yıl**-Year													
5	**İl**-Province	Sex	2009	2010	2011	2012	2013	2014	2015	2016	2017(r)	2018(r)	2019(r)	2020(r)	2021(r)	2022
6	**Türkiye**-Türkiye	**Toplam**-Total	**17 607**	**15 164**	**14 567**	**14 974**	**14 027**	**14 951**	**13 677**	**12 910**	**12 134**	**11 718**	**11 022**	**9 757**	**10 089**	**9 522**
7		**Erkek**-Male	**9 541**	**8 242**	**7 843**	**8 022**	**7 601**	**8 212**	**7 440**	**6 994**	**6 598**	**6 360**	**6 065**	**5 388**	**5 498**	**5 289**
8		**Kadın**-Female	**8 066**	**6 922**	**6 724**	**6 952**	**6 426**	**6 739**	**6 237**	**5 916**	**5 536**	**5 358**	**4 957**	**4 369**	**4 591**	**4 233**
9																
10	Adana	**Toplam**-Total	**566**	**480**	**490**	**452**	**538**	**527**	**395**	**380**	**340**	**293**	**286**	**292**	**354**	**325**
11		**Erkek**-Male	298	259	272	225	296	303	226	224	178	146	159	152	199	190
12		**Kadın**-Female	268	221	218	227	242	224	169	156	162	147	127	140	155	135
13																
14	Adıyaman	**Toplam**-Total	**232**	**189**	**194**	**191**	**167**	**165**	**150**	**171**	**145**	**134**	**136**	**108**	**135**	**111**
15		**Erkek**-Male	120	101	101	106	102	91	76	86	81	77	75	55	61	56
16		**Kadın**-Female	112	88	93	85	65	74	74	85	64	57	61	53	74	55
17																
18	Afyonkarahisar	**Toplam**-Total	**179**	**131**	**135**	**161**	**136**	**108**	**107**	**98**	**89**	**96**	**91**	**79**	**74**	**78**
19		**Erkek**-Male	89	64	81	91	70	55	56	65	50	54	58	47	42	38
20		**Kadın**-Female	90	67	54	70	66	53	51	33	39	42	33	32	32	40
21																
22	Ağrı	**Toplam**-Total	**207**	**285**	**375**	**300**	**273**	**242**	**244**	**223**	**198**	**165**	**151**	**134**	**162**	**107**
23		**Erkek**-Male	115	156	195	178	145	114	129	121	90	92	90	69	82	52
24		**Kadın**-Female	92	129	180	122	128	128	115	102	108	73	61	65	80	55

Figure 1. Selected datapoint

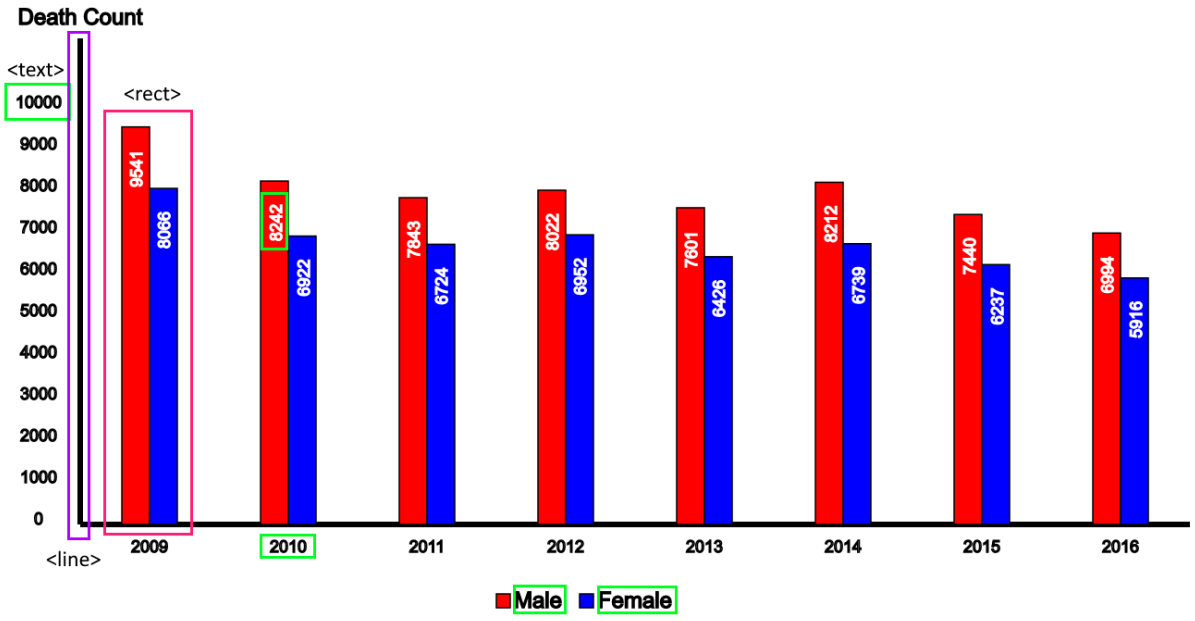

Figure 2. Labeled Final Chart