Programming Assignment 2

Language – Any programming language

The file "CityWeather.csv" contains average temperature of major cities in Asia. The data is saved in CSV format (comma separated values). The data in table format is as below...

Country	City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Afghanistan	Kabul	-2.3	-0.7	6.3	12.8	17.3	22.8	25	24.1	19.7	13.1	5.9	0.6
Azerbaijan	Baku	4.4	4.2	7	12.9	18.5	23.5	26.4	26.3	22.5	16.6	11.2	7.3
Armenia	Yerevan	-3.6	0.1	6.3	12.9	17.4	22.6	26.4	26.1	21.1	13.8	6.2	-0.2
Bahrain	Manama	17.2	18	21.2	25.3	30	32.6	34.1	34.2	32.5	29.3	24.5	19.3
Bangladesh	Dhaka	18.6	22	26.3	28.4	28.8	29	28.7	28.9	28.5	27.4	24	20
Cambodia	Phnom Penh	26.6	28	29.4	30.2	30	29.2	28.7	28.5	28.2	27.2	27.1	26.3
China	Beijing	-3.1	0.3	6.7	14.8	20.8	24.9	26.7	25.5	20.8	13.7	5	-0.9
China	Chongqing	8	10.1	14	18.8	22.8	25.3	28.5	28.6	24.3	18.7	14.3	9.3
China	Lhasa	-2.1	1.1	4.6	8.1	11.9	15.5	15.3	14.5	12.8	8.1	2.2	-1.7
China	Shanghai	4.6	6.1	9.6	15.1	20.3	24.1	28.4	28.1	24.4	19.3	13.4	7.1
China	Ürümqi	-12.1	-9.3	-0.5	10.4	17	21.8	23.9	22.7	17	8.4	-1.5	-9.4
East Timor	Dili	27.7	27.6	27.4	27.4	27	26.8	25.5	25.1	25.4	26	27.2	27.4
Georgia	Batumi	6	7	8	12	16	20	22	22	20	16	12	8
Georgia	Tbilisi	1.2	2.7	6.6	12.2	17.4	21.3	24.5	24.1	19.6	13.7	7.8	3.2
Hong Kong	Hong Kong	16.3	16.8	19.1	22.6	25.9	27.9	28.8	28.6	27.7	25.5	21.8	17.9
India	New Delhi	13.8	16.5	22.1	28.7	32.8	34	30.9	29.7	29	26.1	20.5	15.3
India	Kolkata	20.1	22.8	27.6	30.5	31.3	30.4	29.1	28.8	28.8	27.5	23.7	20.3
India	Mumbai	23.7	24.5	26.8	28.4	29.9	29.2	27.6	27.2	27.3	28.3	27.2	25.2
Indonesia	Jakarta	26.1	26.1	26.4	27	27.2	26.7	26.4	26.7	27	27.2	27	26.4
Iraq	Baghdad	9.7	12	16.6	22.6	28.3	32.3	34.8	34	30.5	24.7	16.5	11.2
Iraq	Erbil	6.2	8.1	12.2	17.4	23.6	28.9	32.9	32.1	28.2	21.4	14.1	8.3
Iran	Tehran	1	5	10	17	21	27	31	29	26	18	11	5
Iran	Ahvaz	12.3	14.7	19	24.9	31.1	35.2	37.3	36.7	33	27.3	19.8	14
Iran	Tabriz	-1.7	0.5	5.6	11.5	16.7	22.1	26	25.9	21.4	14.5	7.1	1.2
Israel	Tel Aviv	12	13	15	18	21	23	26	26	25	22	18	13
Japan	Sapporo	-3.6	-3.1	0.6	7.1	12.4	16.7	20.5	22.3	18.1	11.8	4.9	-0.9
Japan	Tokyo	5.2	5.7	8.7	13.9	18.2	21.4	25	26.4	22.8	17.5	12.1	7.6
Japan	Naha	17	17.1	18.9	21.4	24	26.8	28.9	28.7	27.6	25.2	22.1	18.7
Kazakhstan	Almaty	-4.7	-3.0	3.4	11.5	16.6	21.6	23.8	23	17.6	9.9	2.7	-2.8
Kazakhstan	Astana	-14.2	-14.1	-7.1	5.2	13.9	19.5	20.8	18.8	12.3	4.6	-5.4	-12.1

The data will look as below in the CSV format (note – this is not a complete data). Note that the first row indicates name of the columns.

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Country, City, Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
Afghanistan, Kabul, -2.3, -0.7, 6.3, 12.8, 17.3, 22.8, 25, 24.1, 19.7, 13.1, 5.9, 0.6
Azerbaijan, Baku, 4.4, 4.2, 7, 12.9, 18.5, 23.5, 26.4, 26.3, 22.5, 16.6, 11.2, 7.3
Armenia, Yerevan, -3.6, 0.1, 6.3, 12.9, 17.4, 22.6, 26.4, 26.1, 21.1, 13.8, 6.2, -0.2
Bahrain, Manama, 17.2, 18, 21.2, 25.3, 30, 32.6, 34.1, 34.2, 32.5, 29.3, 24.5, 19.3
Bangladesh, Dhaka, 18.6, 22, 26.3, 28.4, 28.8, 29, 28.7, 28.9, 28.5, 27.4, 24, 20
Cambodia, Phnom Penh, 26.6, 28, 29.4, 30.2, 30, 29.2, 28.7, 28.5, 28.2, 27.2, 27.1, 26.3
China, Beijing, -3.1, 0.3, 6.7, 14.8, 20.8, 24.9, 26.7, 25.5, 20.8, 13.7, 5, -0.9
China, Chongqing, 8, 10.1, 14, 18.8, 22.8, 25.3, 28.5, 28.6, 24.3, 18.7, 14.3, 9.3
China, Lhasa, -2.1, 1.1, 4.6, 8.1, 11.9, 15.5, 15.3, 14.5, 12.8, 8.1, 2.2, -1.7
China, Shanghai, 4.6, 6.1, 9.6, 15.1, 20.3, 24.1, 28.4, 28.1, 24.4, 19.3, 13.4, 7.1
China, Ürümqi, -12.1, -9.3, -0.5, 10.4, 17, 21.8, 23.9, 22.7, 17, 8.4, -1.5, -9.4
East Timor, Dili, 27.7, 27.6, 27.4, 27.4, 27, 26.8, 25.5, 25.1, 25.4, 26, 27.2, 27.4
Georgia, Batumi, 6, 7, 8, 12, 16, 20, 22, 22, 20, 16, 12, 8
Georgia, Tbilisi, 1.2, 2.7, 6.6, 12.2, 17.4, 21.3, 24.5, 24.1, 19.6, 13.7, 7.8, 3.2
Hong Kong, Hong Kong, 16.3, 16.8, 19.1, 22.6, 25.9, 27.9, 28.8, 28.6, 27.7, 25.5, 21.8, 17.9
India, New Delhi, 13.8, 16.5, 22.1, 28.7, 32.8, 34, 30.9, 29.7, 29, 26.1, 20.5, 15.3
India, Kolkata, 20.1, 22.8, 27.6, 30.5, 31.3, 30.4, 29.1, 28.8, 28.8, 27.5, 23.7, 20.3
India, Mumbai, 23.7, 24.5, 26.8, 28.4, 29.9, 29.2, 27.6, 27.2, 27.3, 28.3, 27.2, 25.2
Indonesia, Jakarta, 26.1, 26.1, 26.4, 27, 27.2, 26.7, 26.4, 26.7, 27.2, 27.2, 27.26.4
Iraq, Baghdad, 9.7, 12, 16.6, 22.6, 28.3, 32.3, 34.8, 34, 30.5, 24.7, 16.5, 11.2
Iraq, Erbil, 6.2, 8.1, 12.2, 17.4, 23.6, 28.9, 32.9, 32.1, 28.2, 21.4, 14.1, 8.3
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- a) Write a program which will read this file and will output warmest city in the month of Jan
- b) Write a program which will read this file and output top 5 warmest cities in the month of Feb
- c) Write a program which will read this file and will output warmest and coldest city in the month of Jan
- d) Write a program which will read this file and will output top 5 warmest and top 5 coldest cities in the month of Mar
- e) Write a program which will take two inputs 1) file "CityWeather.csv" 2) name of the month (e.g. Jan or Jun etc). The program shall provide output of top 5 warmest cities and top 5 coldest cities for the given month