The get_opt working and printing the usage of the application

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\get_opt_example.py --help
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name


    # This Client application is capable of performing the following fucntionalities
    1. Add a new user review on a country

    2. View existing reviews on a given country

    3. Register a user

    4. Show all the countries that have a specific legislature

    5. Show the top 10 countries by GDP, population, area, density, GDP per capita, both globally and within each continent

    6. Show all the countries who drive on the right vs. on the left

    7. Query and view a given country / capital city information

    8. Query and view president / monarch's information

    9. Identify the country for a given phone number

    10. Identify the country of a given city

To do a specific functionality of the above enter -t or --task followed by the task number. i.e [-t 3] will give third task
```

First Task

```
TypeError: %d format: a number is required, not str.
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\get_opt_example.py -t 1
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 1

To Add a new user review on a country please enter

1. Email:
youss86@gmail.com
2. Username
youss165
3. Country Name
Tunisia
4. Travel Date
2021-11-10
5. Rating
5
6. Review
I LOVE This Country
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> []
```

Second Task

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\get_opt_example.py -t 2
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 2

To View existing reviews on a given country please enter

1. Country Name
Iceland
The Current reviews of this country are the following:
   CountryName                                       Review  Rating CustomerUserName
0    Iceland                            Bad Experience       1         Andrew101
1    Iceland  This was a beatuiful country and I enjoyed my ...       7  YoussefHussien2
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File>
```

Third Task

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\get_opt_example.py -t 3
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 3

To Register in the system as a user, please enter the following:

1. Email:
rashed@gmail.com
2. Username
mahmoudkabo
3. Date of Birth
2000-06-10
4. Gender
M
5. Age
21
Your are now registered user in the system, Congrats :)
```

Viewing the current users to make sure last task was performed correctly:
It's the user number 16

```
         CustomerEmail CustomerUserName        DOB Gender  Age
0        aarmstrong@example.net        kalvarado 2016-02-13      M   70
1       ashleyhardin@example.com       dunnjeffrey 2010-12-16      M   12
2       brownteresa@example.org     allisonnguyen 2011-05-13      F   47
3            cmoore@example.net           ywalker 1972-05-15      F  101
4       danielgarcia@example.com     patrickmejia 2007-08-08      F   62
5           david23@example.com          lauren58 2008-12-01      M   23
6       emilyparker@example.com       marthadavis 1992-04-29      M   43
7   hendersonsharon@example.org       amyjackson 1988-03-24      F   19
8     jamesjohnson@example.com           cwilson 1977-02-19      F    3
9         joseph85@example.net        sarahwhite 2020-07-21      M   77
10      longkristin@example.org  melissalawrence 1991-03-29      M  103
11     lyonswilliam@example.com    robinsoncheryl 2009-05-15      M  102
12  mccannchristian@example.net     sheilasimmons 1985-08-17      M  109
13       michael62@example.org   harmonfrancisco 1973-08-12      M  116
14        misty04@example.com    michaelsummers 1990-05-04      M   85
15           nfox@example.net      juarezdenise 2010-09-13      F   83
16          rashed@gmail.com       mahmoudkabo 2000-06-10      M   21
17     shortdonna@example.org         rsimpson 2012-06-06      F   88
18       steven54@example.net         afleming 2007-08-20      M   12
19    wrightsamuel@example.org          anita57 1980-12-29      F   11
20  youssefhussien@aucegypt.edu  YoussefHussien 2000-12-09      M   21
21        zyoung@example.net          lconley 2006-09-14      F  107
```

Task 4:

```
You selected task number 4

To Show all the countries that have a specific legislature, enter the following

1. Legislature Type
National Assembly
The Countries of this legislature type are the following:
                                        CountryName       Legislator
0                                            Belize  National Assembly
1               Bolivarian Republic of Venezuela  National Assembly
2                                      Burkina Faso  National Assembly
3                         Central African Republic  National Assembly
4                   Co-operative Republic of Guyana  National Assembly
5    Democratic Republic ofSï¿½o Tomï¿½ and Prï¿½ncipe  National Assembly
6                     Federal Republic of Nigeria  National Assembly
7                                           Hungary  National Assembly
8                 Islamic Republic of Mauritania  National Assembly
9                           Kingdom of Thailand  National Assembly
10               Lao People's Democratic Republic  National Assembly
11                        Republic of Angola  National Assembly
12                       Republic of Armenia  National Assembly
13                       Republic of Armenia  National Assembly
14                     Republic of Azerbaijan  National Assembly
15                     Republic of Azerbaijan  National Assembly
16                       Republic of Belarus  National Assembly
17                         Republic of Benin  National Assembly
18                      Republic of Botswana  National Assembly
19                      Republic of Bulgaria  National Assembly
20                    Republic of Cabo Verde  National Assembly
21                     Republic of Djibouti  National Assembly
22                       Republic of Guinea  National Assembly
23                        Republic of Korea  National Assembly
24                       Republic of Malawi  National Assembly
25                     Republic of Mauritius  National Assembly
26                     Republic of Nicaragua  National Assembly
27                       Republic of Panama  National Assembly
28                      Republic of Senegal  National Assembly
29                       Republic of Serbia  National Assembly
```

Task 5

By GDP

```
     To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 5

To show the top 10 countries by 1. GDP or 2. population or 3. density or 4. GDP Per Capita, enter the respective number

1
The Top Countries by GDP Globally are
                                  CountryName  GDPPurchase  GDPNominal
0                          Republic of Moldova    36886.000   12396.000
1                          Kingdom of Thailand     1340.000     536.841
2                  Socialist Republic of Vietnam    1047.318     340.602
3                  People's Republic of Bangladesh     966.485     409.000
4                          Republic of Slovenia      909.000     609.000
5                                     Malaysia      900.426     336.330
6                          Republic of Colombia      827.662     343.177
7                          Republic of Vanuatu       820.000     957.000
8   Democratic Republic ofSï¿½o Tomï¿½ and Prï¿½ncipe      685.000     355.000
9                          Kingdom of Tonga          655.000     493.000
The Top 10 Countries by GDP Per Continent are
                                  CountryName  GDPPurchase  GDPNominal       Continent
0                          Republic of Colombia      827.662     343.177  South America
1                              Republic of Peru      385.719     195.761  South America
2                  Bolivarian Republic of Venezuela    142.416      44.893  South America
3                          Republic of Paraguay      101.075      44.557  South America
4                  Plurinational State of Bolivia      89.018      40.687  South America
5                  Oriental Republic of Uruguay       86.562      62.917  South America
6                  Co-operative Republic of Guyana      18.357       7.255  South America
7                  Federative Republic of Brazil       3.328       1.491  South America
8                          Argentine Republic[A]        1.033     444.458  South America
9                              Republic of Cuba      254.865     105.300  North America
10                             Dominican Republic      215.999      96.291  North America
11                         Republic of Guatemala      145.249      79.109  North America
12                            Republic of Panama      121.749      73.369  North America
13                         Republic of Costa Rica       95.791      65.179  North America
14                         Republic of El Salvador      53.667      25.855  North America
15                             Republic of Honduras      49.010      23.835  North America
```

8	Argentine Republic[A]	1.099	444.498	South America
9	Republic of Cuba	254.865	105.300	North America
10	Dominican Republic	215.999	96.291	North America
11	Republic of Guatemala	145.249	79.109	North America
12	Republic of Panama	121.749	73.369	North America
13	Republic of Costa Rica	95.791	65.179	North America
14	Republic of El Salvador	53.667	25.855	North America
15	Republic of Honduras	49.010	23.835	North America
16	Republic of Trinidad and Tobago	45.148	22.438	North America
17	Republic of Nicaragua	35.757	13.380	North America
18	Republic of Haiti	34.189	22.431	North America
19	Democratic Republic ofSï¿½o Tomï¿½ and Prï¿½ncipe	685.000	355.000	Africa
20	People's Democratic Republic of Algeria	532.565	163512.000	Africa
21	Kingdom of Morocco	332.358	122.458	Africa
22	Federal Democratic Republic of Ethiopia	278.000	91.514	Africa
23	Republic of Kenya	250.854	109.116	Africa
24	Republic of Ghana	226.000	73.594	Africa
25	Republic of Angola	213.034	64.480	Africa
26	United Republic of Tanzania	200.144	65.632	Africa
27	Republic of the Sudan	177.678	33.903	Africa
28	Republic of Tunisia	159.707	44.192	Africa
29	Kingdom of Thailand	1340.000	536.841	Asia
30	Socialist Republic of Vietnam	1047.318	340.602	Asia
31	People's Republic of Bangladesh	966.485	409.000	Asia
32	Malaysia	900.426	336.330	Asia
33	Republic of Singapore	600.063	374.394	Asia
34	Republic of Iraq	413.316	250.070	Asia
35	State of Israel	372.314	410.501	Asia
36	State of Qatar	357.338	183.807	Asia
37	Democratic Socialist Republic of Sri Lanka	306.997	84.532	Asia
38	Republic of Uzbekistan	275.806	60.490	Asia
39	Republic of Moldova	36886.000	12396.000	Europe
40	Republic of Slovenia	909.000	609.000	Europe
41	Romania	653.903	289.130	Europe
42	Swiss Confederation	584.000	749.000	Europe

By Population

```
2
The Top Countries by Population Globally are
                       CountryName   Population
0        People's Republic of China  1411778724
1                 Republic of India  1352642280
2          United States of America   331449281
3             Republic of Indonesia   270203917
4             Republic of Indonesia   270203917
5        Islamic Republic of Pakistan  225199937
6         Federal Republic of Nigeria  211400708
7        Federative Republic of Brazil  210147125
8    People's Republic of Bangladesh   161376708
9                Russian Federation   146171015
The Top 10 Countries by Population Per Continent are
                          CountryName  Population     Continent
0         Federative Republic of Brazil  210147125  South America
1               Republic of Colombia    50372424  South America
2               Argentine Republic[A]    45605826  South America
3                  Republic of Peru     34294231  South America
4       Bolivarian Republic of Venezuela  28887118  South America
5        Plurinational State of Bolivia   11428245  South America
6              Republic of Paraguay     7359000  South America
7          Oriental Republic of Uruguay   3518552  South America
8        Co-operative Republic of Guyana    743700  South America
9             United States of America  331449281  North America
10               United Mexican States  126014024  North America
11                            Canada    38246108  North America
12             Republic of Guatemala    17263239  North America
13                 Republic of Haiti    11439646  North America
14                  Republic of Cuba    11181595  North America
15                Dominican Republic    10878246  North America
16               Republic of Honduras    9587522  North America
17            Republic of El Salvador    6830000  North America
```

9	United States of America	331449281	North America
10	United Mexican States	126014024	North America
11	Canada	38246108	North America
12	Republic of Guatemala	17263239	North America
13	Republic of Haiti	11439646	North America
14	Republic of Cuba	11181595	North America
15	Dominican Republic	10878246	North America
16	Republic of Honduras	9587522	North America
17	Republic of El Salvador	6830000	North America
18	Republic of Nicaragua	6486201	North America
19	Federal Republic of Nigeria	211400708	Africa
20	Federal Democratic Republic of Ethiopia	117876227	Africa
21	Arab Republic of Egypt	101478581	Africa
22	Democratic Republic of the Congo	92377393	Africa
23	United Republic of Tanzania	61193226	Africa
24	Republic of Kenya	54985698	Africa
25	Republic of the Sudan	44909353	Africa
26	People's Democratic Republic of Algeria	44700000	Africa
27	Republic of Uganda[1]	42729036	Africa
28	People's Republic of China	1411778724	Asia
29	Republic of India	1352642280	Asia
30	Republic of Indonesia	270203917	Asia
31	Islamic Republic of Pakistan	225199937	Asia
32	People's Republic of Bangladesh	161376708	Asia
33	Russian Federation	146171015	Asia
34	Japan	125360000	Asia
35	Republic of the Philippines	109035343	Asia
36	French Republic	67413000	Europe
37	Italian Republic	60317116	Europe
38	Kingdom of Spain	47450795	Europe
39	Ukraine	41342465	Europe
40	Republic of Poland	38268000	Europe

By Density

```
    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 5

To show the top 10 countries by 1. GDP or 2. population or 3. density or 4. GDP Per Capita, enter the respective number

3
The Top Countries by Density Globally are
                      CountryName    Density
0          Republic of Singapore  7485.039802
1           Republic of Maldives  1858.086667
2              Republic of Malta  1628.367089
3   People's Republic of Bangladesh  1086.272940
4             State of Palestine[i]   856.989369
5               Lebanese Republic   656.277076
6               Republic of China   647.894494
7           Republic of Mauritius   620.330882
8               Republic of Korea   515.220729
9              Republic of Rwanda   469.830549
The Top 10 Countries by Density Per Continent are
                             CountryName     Density      Continent
0                    Republic of Colombia   44.118688  South America
1         Bolivarian Republic of Venezuela   31.520842  South America
2                       Republic of Peru   26.683632  South America
3           Federative Republic of Brazil   24.677416  South America
4         Oriental Republic of Uruguay   19.967381  South America
5               Republic of Paraguay   18.090148  South America
6               Argentine Republic[A]   16.402613  South America
7         Plurinational State of Bolivia   10.402733  South America
```

```
13                              Jamaica   248.081794  North America
14                   Dominican Republic   223.505702  North America
15                Republic of Guatemala   158.539788  North America
16                     Republic of Cuba   101.758172  North America
17                Republic of Costa Rica    99.689198  North America
18             United States of America    87.298342  North America
19                Republic of Mauritius   620.330882         Africa
20                   Republic of Rwanda   469.830549         Africa
21                Union of the Comoros   457.219774         Africa
22                  Republic of Burundi   426.306711         Africa
23           Federal Republic of Nigeria   228.845856         Africa
24               Republic of Seychelles   214.514161         Africa
25  Democratic Republic ofSï¿½o Tomï¿½ and Prï¿½ncipe   210.817183         Africa
26              Republic of The Gambia   203.386566         Africa
27               Republic of Uganda[1]   177.270953         Africa
28                 Republic of Malawi   161.455994         Africa
29               Republic of Singapore  7485.039802           Asia
30                Republic of Maldives  1858.086667           Asia
31      People's Republic of Bangladesh  1086.272940           Asia
32                State of Palestine[i]   856.989369           Asia
33                  Lebanese Republic   656.277076           Asia
34                  Republic of China   647.894494           Asia
35                  Republic of Korea   515.220729           Asia
36                    State of Israel   453.880597           Asia
37                  Republic of India   411.479787           Asia
38           Republic of the Philippines   363.451143           Asia
39                  Republic of Malta  1628.367089         Europe
40                        Netherlands   421.738923         Europe
```

By GDP Per Capita

```
    A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 5

To show the top 10 countries by 1. GDP or 2. population or 3. density or 4. GDP Per Capita, enter the respective number

4
The Top Countries by GDP Per Capita Globally are
                                      CountryName  GDPPurchase_Per_Capita  GDPNominal_Per_Capita
0                                Republic of Moldova                0.014203               0.004773
1                                 Kingdom of Tonga                 0.006508               0.004898
2                        Federated States of Micronesia            0.003513               0.003666
3   Democratic Republic ofSï¿½o Tomï¿½ and Prï¿½ncipe             0.003246               0.001682
4                               Republic of Vanuatu               0.002664               0.003109
5                               Republic of Slovenia              0.000431               0.000289
6                                    State of Qatar               0.000128               0.000066
7                              Republic of Singapore              0.000110               0.000069
8                         Grand Duchy of Luxembourg               0.000106               0.000110
9                                       Ireland[a]                0.000100               0.000095
The Top 10 Countries by GDP Per Capita Per Continent are
                                      CountryName  GDPPurchase_Per_Capita  GDPNominal_Per_Capita     Continent
0                  Co-operative Republic of Guyana            2.468334e-05           9.755278e-06  South America
1                    Oriental Republic of Uruguay            2.460160e-05           1.788150e-05  South America
2                          Republic of Colombia              1.643086e-05           6.812795e-06  South America
3                          Republic of Paraguay              1.373488e-05           6.054763e-06  South America
4                             Republic of Peru               1.124734e-05           5.708278e-06  South America
5                   Plurinational State of Bolivia            7.789297e-06           3.560214e-06  South America
6                 Bolivarian Republic of Venezuela           4.930087e-06           1.554084e-06  South America
7                        Argentine Republic[A]              2.265061e-08           9.745641e-06  South America
8                   Federative Republic of Brazil            1.583652e-08           7.095029e-09  South America
9                 Republic of Trinidad and Tobago            3.303371e-05           1.641735e-05  North America
10                          Republic of Panama              2.780268e-05           1.675459e-05  North America
11                           Republic of Cuba               2.279326e-05           9.417261e-06  North America
12                          Dominican Republic             1.985605e-05           8.851703e-06  North America
```

```
18                          Republic of El Salvador            7.857540e-06           3.785505e-06  North America
19  Democratic Republic ofSï¿½o Tomï¿½ and Prï¿½ncipe            3.246015e-03           1.682241e-03         Africa
20                         Republic of Seychelles             2.964595e-05           1.588430e-05         Africa
21                         Republic of Mauritius              2.505383e-05           1.170470e-05         Africa
22                         Republic of Botswana               1.924920e-05           8.307646e-06         Africa
23                            Gabonese Republic               1.806278e-05           8.121645e-06         Africa
24                          Republic of Tunisia               1.364041e-05           3.774394e-06         Africa
25           People's Democratic Republic of Algeria          1.191421e-05           3.657987e-03         Africa
26                          Republic of Namibia               9.354073e-06           4.284718e-06         Africa
27                          Kingdom of Eswatini               9.018553e-06           3.629659e-06         Africa
28                           Kingdom of Morocco               8.955521e-06           3.299680e-06         Africa
29                             State of Qatar                1.278269e-04           6.575140e-05           Asia
30                          Republic of Singapore             1.100306e-04           6.865080e-05           Asia
31                            Sultanate of Oman               4.223214e-05           1.290099e-05           Asia
32                             State of Israel                3.949401e-05           4.354478e-05           Asia
33                           Republic of Cyprus               3.242423e-05           2.232135e-05           Asia
34                                Malaysia                   2.751072e-05           1.027589e-05           Asia
35                          Kingdom of Thailand               1.915631e-05           7.674546e-06           Asia
36                              Turkmenistan                 1.867941e-05           7.090478e-06           Asia
37                          Republic of Azerbaijan            1.866220e-05           4.470242e-06           Asia
38                          Republic of Moldova               1.420276e-02           4.773016e-03         Europe
39                          Republic of Slovenia              4.313933e-04           2.890193e-04         Europe
40                         Grand Duchy of Luxembourg          1.055014e-04           1.096127e-04         Europe
41                                Ireland[a]                 9.977053e-05           9.518108e-05         Europe
42                         Swiss Confederation               6.814353e-05           8.739641e-05         Europe
43                           Kingdom of Norway                6.478877e-05           6.775054e-05         Europe
44                           Kingdom of Sweden                5.420863e-05           5.084844e-05         Europe
45                                 Iceland                   5.328597e-05           5.597718e-05         Europe
46                          Republic of Austria               5.164255e-05           4.995069e-02         Europe
47                           Kingdom of Belgium               5.010232e-05           4.380333e-05         Europe
48                           Kingdom of Tonga                 6.507635e-03           4.898113e-03        Oceania
49                        Federated States of Micronesia       3.513037e-03           3.666194e-03        Oceania
50                          Republic of Vanuatu               2.663938e-03           3.109010e-03        Oceania
51                              New Zealand                  4.412629e-05           4.739166e-05        Oceania
52                            Republic of Fiji               9.837241e-06           5.638708e-06        Oceania
53                       Independent State of Samoa           5.866493e-06           4.350488e-03        Oceania
54            Independent State of Papua New Guinea           3.624175e-06           2.411080e-06        Oceania
55                            Solomon Islands              2.265427e-06           2.314443e-06        Oceania
```

Task 6
Search by direction : right

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 6
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 6

To Show all the countries who drive on the right vs. on the left, please enter:

1. Driving Side: right or left

right
This is the list of the countries which drive on the 'right'

The Countries driving in that direction are the following:
                         CountryName DrivingSide
0                Arab Republic of Egypt       right
1                Arab Republic of Egypt       right
2                                Belize       right
3        Bolivarian Republic of Venezuela       right
4                 Bosnia and Herzegovina       right
..                                   ...         ...
119                    Togolese Republic       right
120                         Turkmenistan       right
121                              Ukraine       right
122                    Union of the Comoros       right
123                  United Mexican States       right

[124 rows x 2 columns]
```

Left

```
You selected task number 6

To Show all the countries who drive on the right vs. on the left, please enter:

1. Driving Side: right or left

left
This is the list of the countries which drive on the 'left'

The Countries driving in that direction are the following:
                                CountryName DrivingSide
0              Co-operative Republic of Guyana        left
1                     Commonwealth of Australia        left
2               Democratic Republic ofTimor-Leste       left
3    Democratic Socialist Republic of Sri Lanka       left
4            Federal Democratic Republic of Nepal       left
5          Independent State of Papua New Guinea      left
6                                     Ireland[a]       left
7                 Islamic Republic of Pakistan       left
8                                        Jamaica       left
9                                          Japan       left
10                          Kingdom of Bhutan       left
11                        Kingdom of Eswatini       left
12                         Kingdom of Lesotho       left
13                        Kingdom of Thailand       left
14                          Kingdom of Tonga       left
15                                    Malaysia       left
16                                 New Zealand       left
17             People's Republic of Bangladesh       left
18                      Republic of Botswana       left
19                         Republic of Cyprus       left
20                         Republic of Cyprus       left
```

Task 7
Search by country

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 7
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 7

To Show a given country / capital city information, please enter :

Do you want to search by 1. country or 2. capital: enter number


1
Enter Country Name

United States of America
This is the info you requested:
     ID         CountryName        Continent CountryCallingCode   HDI ... PresidentName PresidentDOB PresidentOfficeDate           PresidentPolitical  CapitalCityName
0  261  United States of America  North America                  1  0.926 ...     Joe Biden   1942-11-20                None  ['Democratic (1969ï¿½present)']  Washington, D.C.

[1 rows x 23 columns]
```

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 7
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 7

To Show a given country / capital city information, please enter :

Do you want to search by 1. country or 2. capital: enter number


1
Enter Country Name

Republic of Tunisia
This is the info you requested:
     ID      CountryName Continent CountryCallingCode   HDI       Currency ... Vaccinations PresidentName PresidentDOB PresidentOfficeDate PresidentPolitical  CapitalCityNam
e
0   51  Republic of Tunisia    Africa                 216  0.74  Tunisian dinar ...         None    Kais Saied   1958-02-22          2019-10-23    ['Independent']           Tunis
```

Search by capital city name

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 7
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 7

To Show a given country / capital city information, please enter :

Do you want to search by 1. country or 2. capital: enter number


2
Enter Capital City Name

Ankara


Ankara
This is the info you requested:
   CityName  Population  MetroArea       Governor        Longitude         Latitude
0    Ankara     5663322    24521.0  Mansur YavaÅŸ  32Â°51â€²00â€³E  39Â°55â€²48â€³N
```

Task 8

```
index []
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 8
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name


You selected task number 8

To Query and view president / monarch's information, please enter:


1. President/ Monarch Name


Kais Saied
Kais Saied
The president/monarch info you requested is the following:
   PresidentName          CountryName PresidentDOB PresidentOfficeDate PresidentPolitical
0   Kais Saied  Republic of Tunisia   1958-02-22          2019-10-23    ['Independent']
```

Task 9

Test 1

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 9
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 9

To Identify the country of a given phone number, please enter:

1. The Calling Code

20
2. The phone number
1090433309
The country of the phone number you entered is the following:
            CountryName  CountryCallingCode
0  Arab Republic of Egypt              20
```

Test 2

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 9
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 9

To Identify the country of a given phone number, please enter:

1. The Calling Code

46
2. The phone number
12851561
The country of the phone number you entered is the following:
         CountryName  CountryCallingCode
0  Kingdom of Sweden              46
```

Task 10

Test 1

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 10
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 10

To Identify the country of a given city, please enter:

1. Capital City Name

Cairo
The country of the capital city you entered is the following:
            CountryName
0  Arab Republic of Egypt
```

Test 2

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 10
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 10

To Identify the country of a given city, please enter:

1. Capital City Name

Tunis
The country of the capital city you entered is the following:
            CountryName
0  Republic of Tunisia
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> █
```

Test 3

```
PS D:\AUC\Fall 2021\Courses\Databases\Project\Milestone III-900183162-Youssef Hussien\Python File> python .\runner_code.py -t 10
# Welcome To GEOPEDIA
 A realtime terminal-based application done as part of the Fundamentals of Databases Course Project.

    # This project is done by @Youssef Hussien, affilated to AUC-Fall 2021

    To view the usage and how to use this application enter -h or --help argument after the application name

You selected task number 10

To Identify the country of a given city, please enter:

1. Capital City Name

Ankara
The country of the capital city you entered is the following:
            CountryName
0  Republic of Turkey
```