```
import pandas as pd
In [17]:
            from matplotlib import pyplot as plt
In [18]:
            data1=pd.read csv('athletes.csv')
In [20]:
            data2=pd.read_csv('countries.csv')
In [23]:
            data3=pd.read csv('events.csv')
In [19]:
            data1
                                                                          height weight
Out[19]:
                           id
                                     name nationality
                                                                                                  sport gold silver
                                                           sex
                                                                     dob
                                   A Jesus
                   736041664
                                                   ESP
                                                                10/17/69
                                                                             1.72
                                                                                      64.0
                                                                                               athletics
                                                                                                            0
                                                                                                                   0
                                                          male
                                    Garcia
                   532037425
                                A Lam Shin
                                                  KOR
                                                        female
                                                                 9/23/86
                                                                             1.68
                                                                                      56.0
                                                                                                fencing
                                                                                                            0
                                                                                                                   0
                                    Aaron
                2
                   435962603
                                                  CAN
                                                                             1.98
                                                                                      79.0
                                                                                               athletics
                                                                                                            0
                                                                                                                   0
                                                          male
                                                                 5/27/92
                                    Brown
                   521041435
                               Aaron Cook
                                                  MDA
                                                                  1/2/91
                                                                                      80.0
                                                                                             taekwondo
                                                                                                                   0
                                                          male
                                                                             1.83
                    33922579
                                                  NZL
                                                                11/26/90
                                                                                                cycling
                                                                                                                   0
                                Aaron Gate
                                                          male
                                                                             1.81
                                                                                      71.0
                                                                                                            0
                                    Zurian
           11533
                   265605954
                                                  CUB
                                                        female
                                                                 8/10/95
                                                                             1.64
                                                                                      58.0
                                                                                               athletics
                                                                                                            0
                                                                                                                   0
                               Hechavarria
                                   Zuzana
           11534
                   214461847
                                                   CZE
                                                        female
                                                                12/19/86
                                                                             1.73
                                                                                      63.0
                                                                                               athletics
                                                                                                            0
                                                                                                                   0
                                   Hejnova
                                                                                                                   0
           11535
                    88361042
                                    di Xiao
                                                  CHN
                                                                 5/14/91
                                                                             1.85
                                                                                     100.0
                                                                                              wrestling
                                                                                                            0
                                                          male
                                   le Quoc
                   900065925
                                                   VIE
                                                                                           weightlifting
           11536
                                                          male
                                                                  4/5/89
                                                                             1.60
                                                                                      56.0
                                                                                                                   0
                                 Toan Tran
                                   le Roux
           11537 711404576
                                                  RSA
                                                                  1/6/92
                                                                             1.85
                                                                                      70.0
                                                                                               athletics
                                                                                                            0
                                                                                                                   0
                                                          male
                                  Hamman
```

11538 rows × 11 columns

In [21]:	data	2			
Out[21]:		country	code	population	gdp_per_capita
	0	Afghanistan	AFG	32526562.0	594.323081
	1	Albania	ALB	2889167.0	3945.217582
	2	Algeria	ALG	39666519.0	4206.031232
	3	American Samoa*	ASA	55538.0	NaN
	4	Andorra	AND	70473.0	NaN

	country	code	population	gdp_per_capita
•••				
196	Vietnam	VIE	91703800.0	2111.138024
197	Virgin Islands*	ISV	103574.0	NaN
198	Yemen	YEM	26832215.0	1406.291651
199	Zambia	ZAM	16211767.0	1304.879014
200	Zimbabwe	ZIM	15602751.0	924.143819

201 rows × 4 columns

In [24]		data
---------	--	------

a3

Out[24]:		id	sport	discipline	name	sex	venues
	0	701492	aquatics	backstroke	Women's 100m Backstroke	female	Olympic Aquatics Stadium
	1	305278	aquatics	backstroke	Women's 200m Backstroke	female	Olympic Aquatics Stadium
	2	708010	aquatics	backstroke	Men's 100m Backstroke	male	Olympic Aquatics Stadium
	3	729643	aquatics	backstroke	Men's 200m Backstroke	male	Olympic Aquatics Stadium
	4	567019	aquatics	breaststroke	Women's 100m Breaststroke	female	Olympic Aquatics Stadium
	•••						
	301	755045	wrestling	greco roman	Men's Greco-Roman 59 kg	male	Carioca Arena 2
	302	331407	wrestling	greco roman	Men's Greco-Roman 66 kg	male	Carioca Arena 2
	303	169856	wrestling	greco roman	Men's Greco-Roman 75 kg	male	Carioca Arena 2
	304	858736	wrestling	greco roman	Men's Greco-Roman 85 kg	male	Carioca Arena 2
	305	767420	wrestling	greco roman	Men's Greco-Roman 98 kg	male	Carioca Arena 2

306 rows × 6 columns

## In [28]: data1.dtypes

Out[28]: id int64 name object nationality object sex object object dob float64 height weight float64 sport object gold int64 silver int64 bronze int64 dtype: object

In [29]:

data2.dtypes

Out[29]: country

object

```
code
                             object
                            float64
         population
                            float64
         gdp_per_capita
         dtype: object
In [30]:
          data3.dtypes
                         int64
Out[30]: id
         sport
                        object
         discipline
                        object
                        object
         name
                        object
         sex
                        object
         venues
         dtype: object
In [25]:
          numero_filas=len(data1)
          print("Numero de filas:", numero_filas)
         Numero de filas: 11538
          numero_filas=len(data2)
In [26]:
          print("Numero de filas:", numero_filas)
         Numero de filas: 201
          numero filas=len(data3)
In [27]:
          print("Numero de filas:", numero_filas)
         Numero de filas: 306
          csv_list=['id', 'name', 'nationality', 'sex', 'dob', 'height', 'weight', 'sport', 'gold
In [55]:
          for item in csv list:
              print(data1[item].describe())
         count
                   1.153800e+04
                  4.999885e+08
         mean
                   2.908648e+08
         std
         min
                   1.834700e+04
         25%
                   2.450997e+08
         50%
                  5.002011e+08
         75%
                  7.539874e+08
                  9.999878e+08
         Name: id, dtype: float64
         count
                          11538
                          11517
         unique
         top
                    Ivan Ivanov
         freq
         Name: name, dtype: object
                    11538
         count
         unique
                      207
         top
                      USA
                      567
         freq
         Name: nationality, dtype: object
                   11538
         count
         unique
                        2
                     male
         top
         freq
                     6333
         Name: sex, dtype: object
                      11537
         count
                       5595
         unique
                   12/20/90
         top
         freq
         Name: dob, dtype: object
                   11208.000000
         count
         mean
                       1.766282
```

```
std
                       0.112719
                       1.210000
          min
          25%
                       1.690000
          50%
                       1.760000
          75%
                       1.840000
                       2.210000
          max
          Name: height, dtype: float64
          count
                   10879.000000
                      72.068205
          mean
                      16.177334
          std
          min
                      31.000000
          25%
                      60.000000
          50%
                      70.000000
          75%
                      81.000000
                     170.000000
          max
          Name: weight, dtype: float64
                        11538
          count
          unique
                           28
          top
                    athletics
          freq
                         2363
          Name: sport, dtype: object
                  11538.000000
          count
                       0.057722
          mean
          std
                       0.255910
                       0.000000
          min
          25%
                       0.000000
          50%
                       0.000000
          75%
                       0.000000
                       5.000000
          max
          Name: gold, dtype: float64
          count
                   11538.000000
          mean
                       0.056769
          std
                       0.239147
          min
                       0.000000
          25%
                       0.000000
                       0.000000
          50%
          75%
                       0.000000
                       2.000000
          max
          Name: silver, dtype: float64
                  11538.000000
          count
          mean
                       0.061016
          std
                       0.243320
          min
                       0.000000
          25%
                       0.000000
          50%
                       0.000000
          75%
                       0.000000
                       2.000000
          max
          Name: bronze, dtype: float64
In [56]:
          csv_list=['country', 'code', 'population', 'gdp_per_capita']
          for item in csv list:
               print(data2[item].describe())
          count
                         201
                         201
          unique
                    Pakistan
          top
          freq
          Name: country, dtype: object
          count
                    201
          unique
                    201
          top
                    CUB
          freq
                      1
          Name: code, dtype: object
                   1.960000e+02
          count
                   3.722825e+07
          mean
```

```
1.399655e+08
          std
          min
                   1.022200e+04
          25%
                   1.638278e+06
          50%
                   7.450124e+06
          75%
                   2.557454e+07
                   1.371220e+09
          max
          Name: population, dtype: float64
          count
                      176.000000
          mean
                    12882.556131
          std
                    17747.141203
          min
                      277.068309
          25%
                     1781.096847
          50%
                     5233.583395
          75%
                    15494.683646
          max
                   101449.968168
          Name: gdp_per_capita, dtype: float64
          csv_list=['id', 'sport', 'discipline', 'name', 'sex', 'venues']
In [57]:
          for item in csv list:
               print(data3[item].describe())
                      306.000000
          count
          mean
                   495682.434641
                   286891.455207
          std
                      617.000000
          min
          25%
                   247029.750000
          50%
                   520445.500000
          75%
                   753803.250000
                   981370.000000
          max
          Name: id, dtype: float64
          count
                          306
          unique
                           28
          top
                    athletics
          freq
          Name: sport, dtype: object
                          306
          count
                           50
          unique
          top
                    freestyle
          freq
                           26
          Name: discipline, dtype: object
                      306
          count
          unique
                      273
          top
                    Women
          freq
                       11
          Name: name, dtype: object
          count
                     306
          unique
          top
                    male
          freq
                     161
          Name: sex, dtype: object
          count
                                 306
          unique
                                  33
          top
                    Olympic Stadium
          frea
          Name: venues, dtype: object
```