```
import pandas as pd
```

```
data = {'Country':['beligiyum', 'India','Brazil'],
'Capital' : ['Brussels','New Delhi','brasillia'],
'Population' : [11190886,1303171035,202747528]}
```

```
df = pd.DataFrame(data,columns=['Country','Capital','Population'])
```

```
df
```

	Country	Capital	Population
0	beligiyum	Brussels	11190886
1	India	New Delhi	1303171035
2	Brazil	brasillia	202747528

Next steps: Generate code with df | New interactive sheet

```
df1 = pd.read_csv("BigBasket.csv")
```

```
df1
```

	ProductName	Brand	Price	DiscountPrice	Image_Url	Quantity	Category
0	Onion (Loose)	Fresho	69.75	52.0	https://www.bigbasket.com/media/uploads/p/l/40...	2 kg	Fruits & Vegetables
1	Onion	Fresho	174.35	130.0	https://www.bigbasket.com/media/uploads/p/l/12...	5 kg	Fruits & Vegetables
2	Onion (Loose)	Fresho	34.87	26.0	https://www.bigbasket.com/media/uploads/p/l/10...	1 kg	Fruits & Vegetables
3	Onion	Fresho	69.74	52.0	https://www.bigbasket.com/media/uploads/p/l/12...	2 kg	Fruits & Vegetables
4	Onion (Loose)	Fresho	174.37	129.0	https://www.bigbasket.com/media/uploads/p/l/10...	5 kg	Fruits & Vegetables
...	...	...	...	...	...	...	...
8203	Foil Alphabet Balloon - Letter V, Party Decor,...	Bvishal	49.00	25.0	https://www.bigbasket.com/media/uploads/p/l/40...	1 pc	Cleaning & Household
8204	Decoration Balls - Used For Parties, Unique De...	Bvishal	399.00	249.0	https://www.bigbasket.com/media/uploads/p/l/40...	6 pcs	Cleaning & Household
8205	Foundation Blending Brush - 230	PAC	465.00	232.5	https://www.bigbasket.com/media/uploads/p/l/40...	1 pc	Beauty & Hygiene
8206	One Week Immunity Booster	The Healthy Company	799.00	799.0	https://www.bigbasket.com/media/uploads/p/l/40...	28 g	Beauty & Hygiene
8207	Blush & Glow - Green Apple Apricot Gel Scrub, ...	Lakme	250.00	175.0	https://www.bigbasket.com/media/uploads/p/l/40...	100 g	Beauty & Hygiene

8208 rows × 9 columns

Next steps: Generate code with df1 New interactive sheet

```
df.head()
```

	Country	Capital	Population
0	beligiyum	Brussels	11190886
1	India	New Delhi	1303171035
2	Brazil	brasillia	202747528

Next steps: Generate code with df New interactive sheet

```
df.tail()
```

	Country	Capital	Population
0	beligiyum	Brussels	11190886
1	India	New Delhi	1303171035
2	Brazil	brasillia	202747528

```
df.sample()
```

	Country	Capital	Population
2	Brazil	brasillia	202747528

```
df.shape
```

```
(3, 3)
```

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 3 entries, 0 to 2
Data columns (total 3 columns):
 #   Column      Non-Null Count  Dtype 
---  ------      --------------  ----- 
 0   Country     3 non-null      object
 1   Capital     3 non-null      object
 2   Population  3 non-null      int64 
dtypes: int64(1), object(2)
memory usage: 204.0+ bytes
```

```
df.describe()
```

	Population
count	3.000000e+00
mean	5.057031e+08
std	6.972372e+08
min	1.119089e+07
25%	1.069692e+08
50%	2.027475e+08
75%	7.529593e+08
max	1.303171e+09

```
df.dtypes
```

	0
Country	object
Capital	object
Population	int64

dtype: object

```
df.columns
```

```
Index(['Country', 'Capital', 'Population'], dtype='object')
```

```
df.index
```

```
RangeIndex(start=0, stop=3, step=1)
```

```
df1["Price"]
```

	Price
0	69.75
1	174.35
2	34.87
3	69.74
4	174.37
...	...
8203	49.00
8204	399.00
8205	465.00
8206	799.00
8207	250.00

8208 rows × 1 columns

dtype: float64

```
Start coding or generate with AI.
```

```
df["columns"]
```

```
df.isull().sum()/len(df1)
```

```
df.isnotnull()
```

```
df.droupna()
```

```
df.fillna()
```

```
df.replace(1,"one ")
```

	Country	Capital	Population
0	beligiyum	Brussels	11190886
1	India	New Delhi	1303171035
2	Brazil	brasillia	202747528

```
df.rename(columns ={"old": "new"})
```

	Country	Capital	Population
0	beligiyum	Brussels	11190886
1	India	New Delhi	1303171035
2	Brazil	brasillia	202747528

```
df.drop_duplicates()
```

	Country	Capital	Population
0	beligiyum	Brussels	11190886
1	India	New Delhi	1303171035
2	Brazil	brasillia	202747528

```
df.groupby("country").count()
```

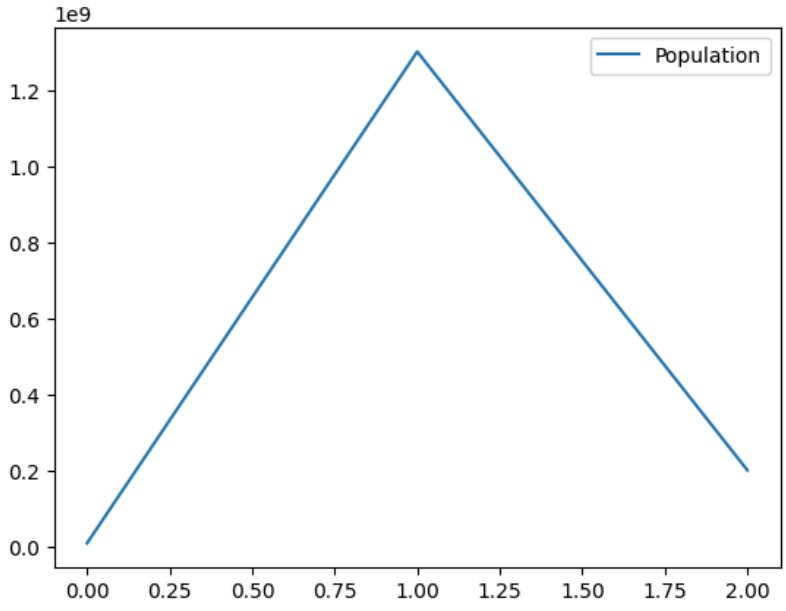
```
---------------------------------------------------------------------------
KeyError                                  Traceback (most recent call last)
/tmp/ipython-input-2287284601.py in <cell line: 0>()
----> 1 df.groupby("country").count()

                                 2 frames
/usr/local/lib/python3.12/dist-packages/pandas/core/groupby/grouper.py in get_grouper(obj, key, axis, level,
sort, observed, validate, dropna)
   1041                 in_axis, level, gpr = False, gpr, None
   1042             else:
-> 1043                 raise KeyError(gpr)
   1044         elif isinstance(gpr, Grouper) and gpr.key is not None:
   1045             # Add key to exclusions

KeyError: 'country'
```

Next steps: Explain error

```
df.['columns'].value_counts()
```

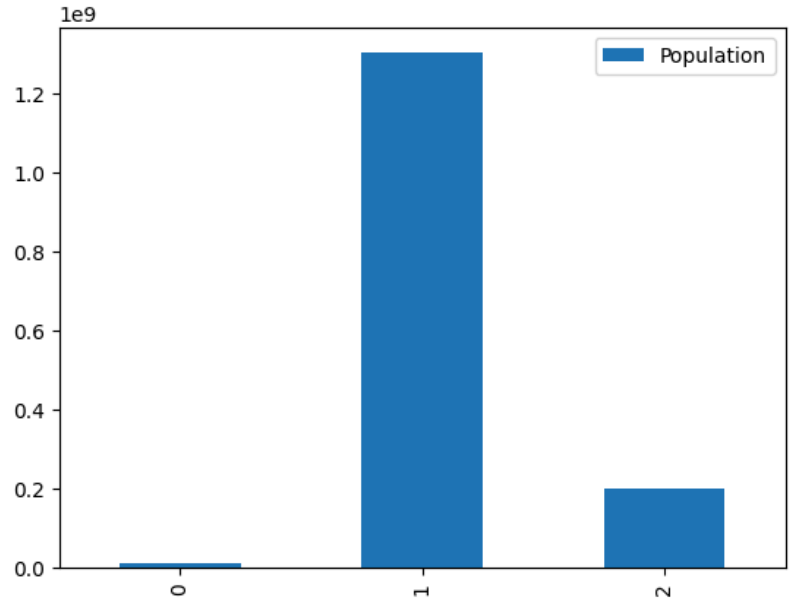
```
df.plot(kind='line')
```

```
<Axes: >
```



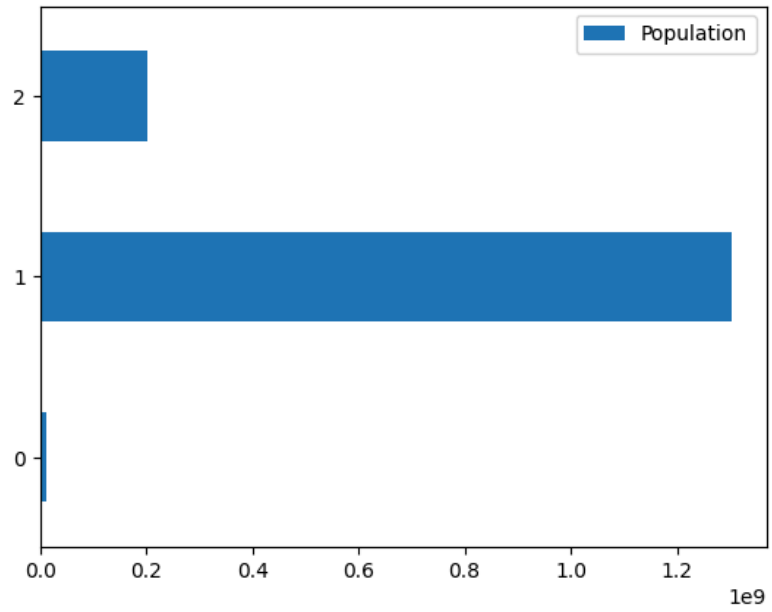

```
df.plot(kind='bar')
```

```
<Axes: >
```



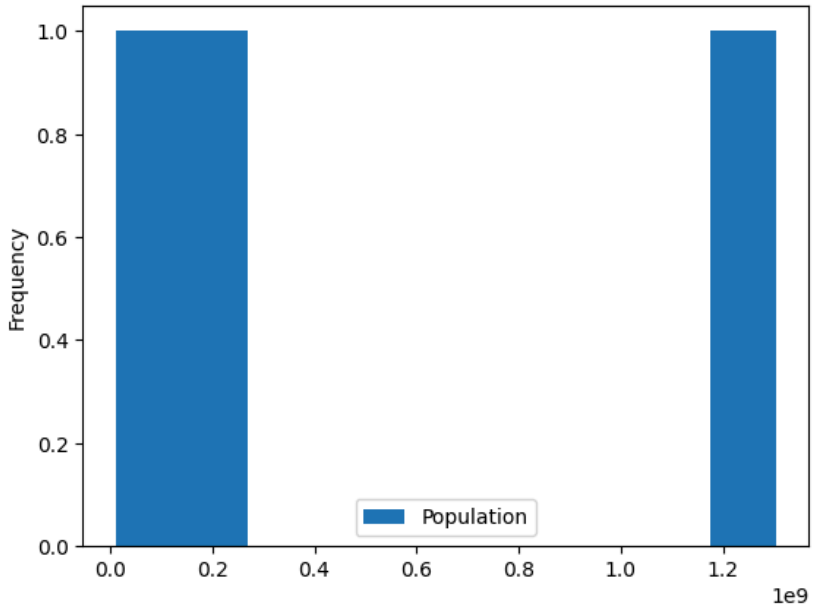

```
df.plot(kind='barh')
```

```
<Axes: >
```



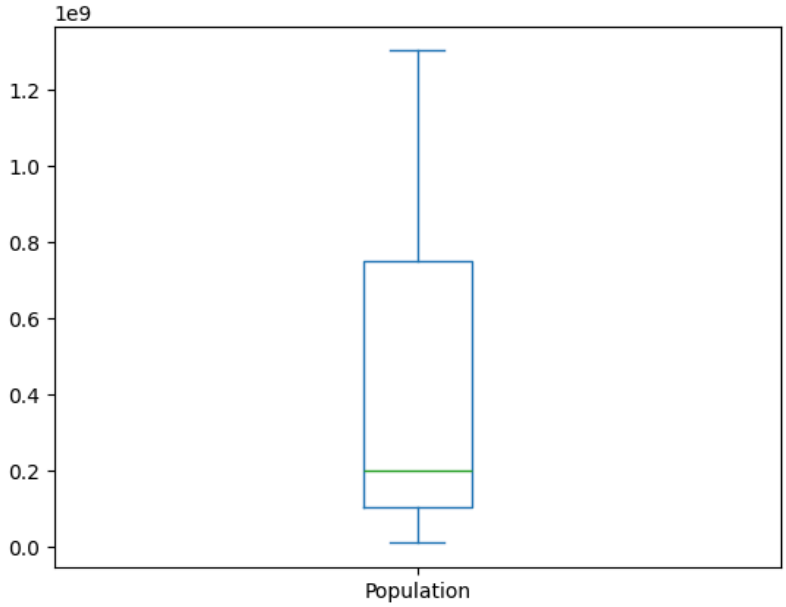

```
df.plot(kind='hist')
```

```
<Axes: ylabel='Frequency'>
```




```
df.plot(kind='box')
```

```
<Axes: >
```




```
df.plot(kind='kde')
```

```
<Axes: ylabel='Density'>
```