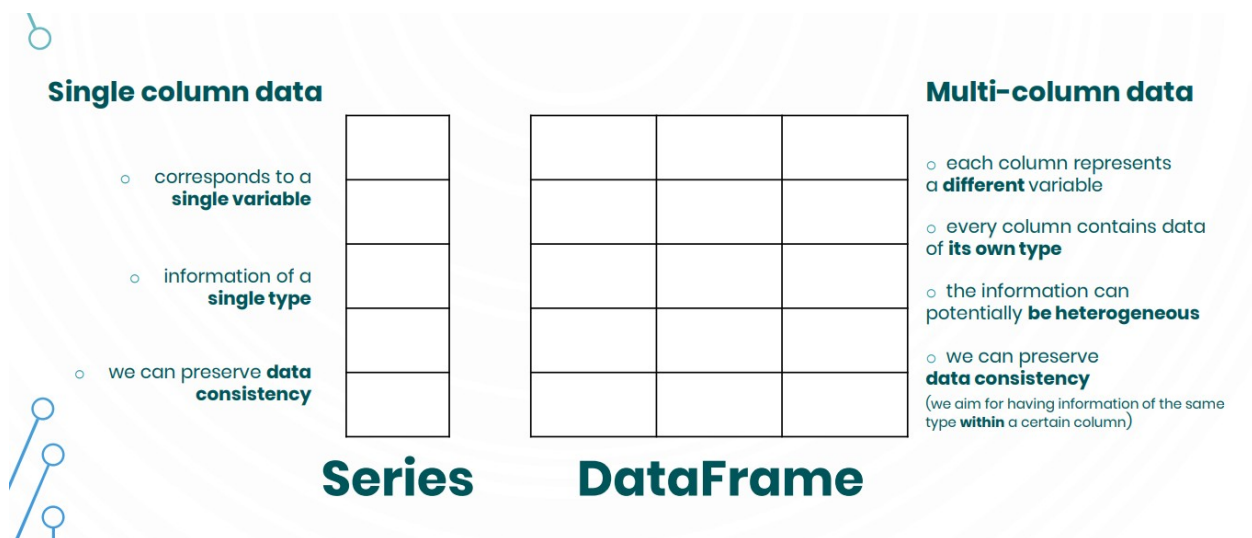


Pandas Basics 🐼

- Pandas is a powerful, open-source Python library specifically designed for data analysis and manipulation. It offers:
- Data Structures:
 - Series: One-dimensional array with labeled data
 - DataFrame: Two-dimensional data structure with rows and columns
 - Panel: Three-dimensional data structure with labeled axes
- Capabilities:
 - Data Import/Export: Reads and writes data from various formats like CSV, Excel, SQL databases, etc.
 - Data Cleaning and Wrangling: Filters, sorts, merges, replaces missing values, etc.
 - Data Analysis: Descriptive statistics, correlations, time series analysis, etc.
 - Visualization: Creates various charts and graphs to explore and communicate data insights.
- Benefits:
 - Efficient: Optimizes data handling and analysis tasks.
 - Flexible: Supports various data types and operations.
 - Easy to Use: Provides intuitive API and extensive documentation.
 - Powerful: Enables complex data analysis and manipulation.



Installing and Running pandas

```
import pandas as pd
```

Series in Python

- A Series in Pandas is a one-dimensional array with labeled data. It is a fundamental data structure within the Pandas ecosystem and serves as the building block for more complex data structures like DataFrames and Panels.
- Key characteristics:
 - One-dimensional array
 - Each element has a corresponding label (index)
 - Can hold data of any type (integers, floats, strings, booleans, etc.)
 - Supports efficient data manipulation and analysis
- Common operations:
 - Accessing elements using labels
 - Data selection and filtering
 - Arithmetic operations and comparisons
 - Data aggregation (sum, mean, max, etc.)
 - Missing value handling
 - Data sorting and ranking
 - Visualization
- Benefits of using Series:
 - Efficiently store and manipulate one-dimensional data
 - Easy to create and work with
 - Powerful data analysis capabilities
 - Integrates seamlessly with other Pandas data structures
- Applications of Series:
 - Representing time series data
 - Categorical data analysis
 - Feature engineering for machine learning
 - Analyzing individual variables in a dataset
 - Creating visualizations like bar charts and histograms

```
a = [10.5, 20, 30, 40, 50, 'hi', 8j]
A = pd.Series(a)
A
0    10.5
1     20
2     30
3     40
4     50
5     hi
6     8j
dtype: object
```

Adding element in the Series

```
A[7] = 'Hello'
A
0      10.5
1       20
2       30
3       40
4       50
5       hi
6       8j
7      Hello
dtype: object

data={'a':0, 'b':1, 'c':2, 'd':3, 'e':4}
B = pd.Series(data)
B
a      0
b      1
c      2
d      3
e      4
dtype: int64
```

Getting Index value in series

```
B.index
Index(['a', 'b', 'c', 'd', 'e'], dtype='object')

print(type(B))
print(B.dtype)
print(B.size)

<class 'pandas.core.series.Series'>
int64
5
```

Dropping columns in series

```
C = B.drop(labels=['a', 'b'])
C
c      2
d      3
e      4
dtype: int64
```

Getting particular range in series

```
A = pd.Series(a,index=range(2,9))
A
2    10.5
3     20
4     30
5     40
6     50
7     hi
8     8j
dtype: object
```

DataFrames in Pandas

- DataFrames are two-dimensional, size-mutable, potentially heterogeneous tabular data structures in Pandas. They act like the backbone of data analysis in Python, offering efficient and flexible data manipulation and analysis capabilities.
- Key characteristics:
 - Two-dimensional table with rows and columns
 - Each row represents a data point
 - Each column represents a variable or feature
 - Can hold data of different types (mixed data types)
 - Supports labeled axes (index for rows and columns)
 - Offers efficient data manipulation and analysis
- Common operations:
 - Accessing elements using row/column labels
 - Data selection and filtering (loc, iloc)
 - Data sorting and grouping
 - Applying functions to rows/columns
 - Merging and joining DataFrames
 - Data aggregation and statistics
 - Data visualization
- Benefits of using DataFrames:
 - Efficiently store and manipulate tabular data
 - Flexible data handling with mixed data types
 - Powerful data analysis capabilities
 - Easy integration with other Pandas libraries and tools
 - Widely used in data science and machine learning
- Applications of DataFrames:
 - Representing and analyzing datasets
 - Feature engineering for machine learning
 - Exploratory data analysis (EDA)

- Data cleaning and preparation
- Data visualization and storytelling

Creating DataFrames

```
data = [['Zahid',23],['Salim',23],['Shaikh',23]]
A = pd.DataFrame(data,columns=['name','age'])
A
```

	name	age
0	Zahid	23
1	Salim	23
2	Shaikh	23

Adding or updating column names

```
A.columns=['firstname','age']
A
```

	firstname	age
0	Zahid	23
1	Salim	23
2	Shaikh	23

```
data={'Name':['Zahid','Salim','Shaikh'],'Marks':[100,75,50]}
df=pd.DataFrame(data,index=['rank1','rank2','rank3'])
print(df)
```

	Name	Marks
rank1	Zahid	100
rank2	Salim	75
rank3	Shaikh	50

Access using iloc and loc

- loc---> location/rowlabels/column labels
- iloc-->index location--->indexposition of rows/indexposition of columns

```
df.iloc[:2,]
```

	Name	Marks
rank1	Zahid	100
rank2	Salim	75

Adding new column in dataframe

```
df['address']= ['Mumbai','Bangalore','Delhi']
df
```

	Name	Marks	address
rank1	Zahid	100	Mumbai

rank2	Salim	75	Bangalore
rank3	Shaikh	50	Delhi

```
df['result'] = [20,30,50]
df
```

	Name	Marks	address	result
rank1	Zahid	100	Mumbai	20
rank2	Salim	75	Bangalore	30
rank3	Shaikh	50	Delhi	50

```
df['updated_result'] = df['result'] + 20
df
```

	Name	Marks	address	result	updated_result
rank1	Zahid	100	Mumbai	20	40
rank2	Salim	75	Bangalore	30	50
rank3	Shaikh	50	Delhi	50	70

Deleting column in DataFrame

```
del df['result']
df
```

	Name	Marks	address	updated_result
rank1	Zahid	100	Mumbai	40
rank2	Salim	75	Bangalore	50
rank3	Shaikh	50	Delhi	70

Dropping particular row from the dataframe

```
df.drop(df[(df['Name'] == 'Shaikh') & (df['Marks'] == 50)].index, axis = 0)
```

	Name	Marks	address	updated_result
rank1	Zahid	100	Mumbai	40
rank2	Salim	75	Bangalore	50

```
df.drop(['rank2'],axis=0)
```

	Name	Marks	address	updated_result
rank1	Zahid	100	Mumbai	40
rank3	Shaikh	50	Delhi	70

```
df
```

	Name	Marks	address	updated_result
rank1	Zahid	100	Mumbai	40
rank2	Salim	75	Bangalore	50
rank3	Shaikh	50	Delhi	70

```
df.iloc[1:3,:3]
```

	Name	Marks	address
rank2	Salim	75	Bangalore
rank3	Shaikh	50	Delhi

Various method to store DataFrame

```
1. to_excel()
2. to_csv()
3. to_pickle()
4. to_json()

df.to_excel(r'df.xlsx')
df.to_csv('df1.csv')
df.to_pickle('data.pkl')

import json
data_json = df.to_json(orient='records')
with open('data.json', 'w') as f:
    json.dump(data_json, f)
with open('data.json', 'r') as f:
    data_json = json.load(f)
```

Various method to store data and convert it into dataframe

```
1. read_excel()
2. read_csv()
3. read_pickle()
4. read_html()

A = pd.read_excel(r'df.xlsx', index_col=0, header=0)
A
```

	Name	Marks	address	updated_result
rank1	Zahid	100	Mumbai	40
rank2	Salim	75	Bangalore	50
rank3	Shaikh	50	Delhi	70

```
B = pd.read_csv(r'df1.csv', index_col=0, header=0)
B
```

	Name	Marks	address	updated_result
rank1	Zahid	100	Mumbai	40
rank2	Salim	75	Bangalore	50
rank3	Shaikh	50	Delhi	70

```
C = pd.read_pickle('data.pkl')
C
```

	Name	Marks	address	updated_result
rank1	Zahid	100	Mumbai	40

rank2	Salim	75	Bangalore	50
rank3	Shaikh	50	Delhi	70

```
D = pd.read_html('https://en.wikipedia.org/wiki/Minnesota')
D
```

```
[
0           Minnesota \
1           State
2  .mw-parser-output .ib-settlement-cols{text-ali...
3  Nicknames: Land of 10,000 Lakes; North Star St...
4  Motto: L'Étoile du Nord (French: The Star of t...
5           Anthem: "Hail! Minnesota"
6  Map of the United States with Minnesota highli...
7           Country
8           Before statehood
9           Admitted to the Union
10          Capital
11          Largest city
12          Largest county or equivalent
13          Largest metro and urban areas
14          Government
15          • Governor
16          • Lieutenant Governor
17          Legislature
18          • Upper house
19          • Lower house
20          Judiciary
21          U.S. senators
22          U.S. House delegation
23          Area
24          • Total
25          • Land
26          • Water
27          • Rank
28          Dimensions
29          • Length
30          • Width
31          Elevation
32          Highest elevation (Eagle Mountain[1][a])
33          Lowest elevation (Lake Superior[1][a][2])
34          Population (2022)
35          • Total
36          • Rank
37          • Density
38          • Rank
39          • Median household income
40          • Income rank
41          Demonym
42          Language
43          • Official language
```


43 • Spoken language
 44 Time zone
 45 • Summer (DST)
 46 USPS abbreviation
 47 ISO 3166 code
 48 Traditional abbreviation
 49 Latitude
 50 Longitude
 51 Website

Minnesota.1
 0 State
 1 .mw-parser-output .ib-settlement-cols{text-ali...
 2 Nicknames: Land of 10,000 Lakes; North Star St...
 3 Motto: L'Étoile du Nord (French: The Star of t...
 4 Anthem: "Hail! Minnesota"
 5 Map of the United States with Minnesota highli...
 6 United States
 7 Minnesota Territory
 8 May 11, 1858 (32nd State in the Union)
 9 Saint Paul
 10 Minneapolis
 11 Hennepin
 12 Minneapolis–Saint Paul
 13 Government
 14 Tim Walz (DFL)
 15 Peggy Flanagan (DFL)
 16 Minnesota Legislature
 17 Senate
 18 House of Representatives
 19 Minnesota Supreme Court
 20 Amy Klobuchar (DFL) Tina Smith (DFL)
 21 4 Democrats 4 Republicans (list)
 22 Area
 23 86,935.83 sq mi (225,163 km2)
 24 79,626.74 sq mi (206,232 km2)
 25 7,309.09 sq mi (18,930 km2) 8.40%
 26 12th
 27 Dimensions
 28 about 400 mi (640 km)
 29 200–350 mi (320–560 km)
 30 1,200 ft (370 m)
 31 2,301 ft (701 m)
 32 602 ft (183 m)
 33 Population (2022)
 34 5,717,184[3]
 35 22nd
 36 68.9/sq mi (26.6/km2)
 37 36th (2020 census)

```

38                                     $74,593[4]
39                                     13th
40                                     Minnesotan
41                                     Language
42                                     none
43     English 88.9% Spanish Somali Hmong[5]
44                                     UTC- 06:00 (Central)
45                                     UTC- 05:00 (CDT)
46                                     MN
47                                     US-MN
48                                     Minn.
49                                     43° 30' N to 49° 23' N
50                                     89° 29' W to 97° 14' W
51                                     mn.gov ,

```

```

List of state symbols \
    Living insignia
0      Bird
1      Butterfly
2      Fish
3      Flower
4      Mushroom
5      Tree
6      Inanimate insignia
7      Beverage
8      Food
9      Gemstone
10     Other
11     State quarter
12     Released in 2005
13 Lists of United States state symbols

```

```

Living insignia.1
0      Common loon
1      Monarch
2      Walleye
3      Pink-and-white lady's slipper
4      Common morel (Morchella esculenta)
5      Norway pine[6]
6      Inanimate insignia
7      Milk
8 .mw-parser-output .plainlist ol,.mw-parser-out...
9      Lake Superior agate
10     Photograph: Grace
11     State quarter
12     Released in 2005
13 Lists of United States state symbols ,
Location July (°F) July (°C) January (°F) January (°C)
0      Minneapolis      83/64      28/18      23/7      -4/-13

```

1	Saint Paul	83/63	28/17	23/6	-5/-14
2	Rochester	82/63	28/17	23/3	-5/-16
3	Duluth	76/55	24/13	19/1	-7/-17
4	St. Cloud	81/58	27/14	18/-1	-7/-18
5	Mankato	86/62	30/16	23/3	-5/-16
6	International Falls	77/52	25/11	15/-6	-9/-21,
Largest cities or towns in Minnesota Source:[81]					

\

Unnamed: 0_level_1

Rank

0	Minneapolis Saint Paul
1	
1	Minneapolis Saint Paul
2	
2	Minneapolis Saint Paul
3	
3	Minneapolis Saint Paul
4	
4	Minneapolis Saint Paul
5	
5	Minneapolis Saint Paul
6	
6	Minneapolis Saint Paul
7	
7	Minneapolis Saint Paul
8	
8	Minneapolis Saint Paul
9	
9	Minneapolis Saint Paul
10	
10	Minneapolis Saint Paul Rochester
Bloomington	

\

	Name	County	Pop.	Unnamed: 5_level_1	
0	Minneapolis	Hennepin	425336.0	Rochester	Bloomington
1	Saint Paul	Ramsey	307193.0	Rochester	Bloomington
2	Rochester	Olmsted	121465.0	Rochester	Bloomington
3	Bloomington	Hennepin	89298.0	Rochester	Bloomington
4	Duluth	St. Louis	86372.0	Rochester	Bloomington
5	Brooklyn Park	Hennepin	84526.0	Rochester	Bloomington
6	Plymouth	Hennepin	79828.0	Rochester	Bloomington
7	Woodbury	Washington	76990.0	Rochester	Bloomington
8	Lakeville	Dakota	72812.0	Rochester	Bloomington
9	Blaine	Anoka	70935.0	Rochester	Bloomington
10	NaN	NaN	NaN		NaN

Unnamed: 6_level_1		Unnamed: 7_level_1		Unnamed: 8_level_1		Unnamed: 9_level_1	
0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2	NaN	NaN	NaN	NaN	NaN	NaN	NaN
3	NaN	NaN	NaN	NaN	NaN	NaN	NaN
4	NaN	NaN	NaN	NaN	NaN	NaN	NaN
5	NaN	NaN	NaN	NaN	NaN	NaN	NaN
6	NaN	NaN	NaN	NaN	NaN	NaN	NaN
7	NaN	NaN	NaN	NaN	NaN	NaN	NaN
8	NaN	NaN	NaN	NaN	NaN	NaN	NaN
9	NaN	NaN	NaN	NaN	NaN	NaN	NaN
10	NaN	NaN	NaN	NaN	NaN	NaN	NaN
,							
				Census	\		
0				1850			
1				1860			
2				1870			
3				1880			
4				1890			
5				1900			
6				1910			
7				1920			
8				1930			
9				1940			
10				1950			
11				1960			
12				1970			
13				1980			
14				1990			
15				2000			
16				2010			
17				2020			
18				2022 (est.)			
19	Source: 1910–2020[82]			2022	Estimate[3]		
				Pop.	\		
0				6077			
1				172023			

2	439706
3	780773
4	1310283
5	1751394
6	2075708
7	2387125
8	2563953
9	2792300
10	2982483
11	3413864
12	3804971
13	4075970
14	4375099
15	4919479
16	5303925
17	5706494
18	5717184
19	Source: 1910–2020[82] 2022 Estimate[3]

.mw-parser-output .sr-only{border:0;clip:rect(0,0,0,0);clip-path:polygon(0px 0px,0px 0px,0px 0px);height:1px;margin:-1px;overflow:hidden;padding:0;position:absolute;width:1px;white-space:nowrap}Note \

0	NaN
1	NaN
2	NaN
3	NaN
4	NaN
5	NaN
6	NaN
7	NaN
8	NaN
9	NaN
10	NaN
11	NaN
12	NaN
13	NaN

14	NaN
15	NaN
16	NaN
17	NaN
18	NaN
19	Source: 1910–2020[82] 2022 Estimate[3]

	%±
0	—
1	2,730.7%
2	155.6%
3	77.6%
4	67.8%
5	33.7%
6	18.5%
7	15.0%
8	7.4%
9	8.9%
10	6.8%
11	14.5%
12	11.5%
13	7.1%
14	7.3%
15	12.4%
16	7.8%
17	7.6%
18	0.2%

19 Source: 1910–2020[82] 2022 Estimate[3] ,

	Race	Percentage
0	White	77.5%
1	Black or African American	7.0%
2	American Indian	1.2%
3	Asian	5.3%
4	Pacific Islander	0.1%
5	Other race	3.2%
6	Two or more races	6.1%,

	Year	Republican		Democratic		Third party	
	Year	No.	%	No.	%	No.	%
0	2020	1484065	45.28%	1717077	52.40%	76029	2.32%
1	2016	1323232	44.93%	1367825	46.44%	254176	8.63%
2	2012	1320225	44.96%	1546167	52.65%	70169	2.39%
3	2008	1275409	43.82%	1573354	54.06%	61606	2.12%
4	2004	1346695	47.61%	1445014	51.09%	36678	1.30%
5	2000	1109659	45.50%	1168266	47.91%	160760	6.59%

6	1996	766476	34.96%	1120438	51.10%	305726	13.94%
7	1992	747841	31.85%	1020997	43.48%	579110	24.66%
8	1988	962337	45.90%	1109471	52.91%	24982	1.19%
9	1984	1032603	49.54%	1036364	49.72%	15482	0.74%
10	1980	873241	42.56%	954174	46.50%	224538	10.94%
11	1976	819395	42.02%	1070440	54.90%	60096	3.08%
12	1972	898269	51.58%	802346	46.07%	41037	2.36%
13	1968	658643	41.46%	857738	54.00%	72129	4.54%
14	1964	559624	36.00%	991117	63.76%	3721	0.24%
15	1960	757915	49.16%	779933	50.58%	4039	0.26%
16	1956	719302	53.68%	617525	46.08%	3178	0.24%
17	1952	763211	55.33%	608458	44.11%	7814	0.57%
18	1948	483617	39.89%	692966	57.16%	35643	2.94%
19	1944	527416	46.86%	589864	52.41%	8249	0.73%
20	1940	596274	47.66%	644196	51.49%	10718	0.86%
21	1936	350461	31.01%	698811	61.84%	80703	7.14%
22	1932	363959	36.29%	600806	59.91%	38078	3.80%
23	1928	560977	57.77%	396451	40.83%	13548	1.40%
24	1924	420759	51.18%	55913	6.80%	345474	42.02%
25	1920	519421	70.59%	142994	19.43%	73423	9.98%
26	1916	179544	46.35%	179152	46.25%	28668	7.40%
27	1912	64334	19.25%	106426	31.84%	163459	48.91%
28	1908	195843	59.11%	109401	33.02%	26060	7.87%
29	1904	216651	73.98%	55187	18.84%	21022	7.18%
30	1900	190461	60.21%	112901	35.69%	12949	4.09%
31	1896	193503	56.62%	139735	40.89%	8524	2.49%
32	1892	122823	45.96%	100920	37.76%	43495	16.28%
33	1888	142492	54.12%	104385	39.65%	16408	6.23%
34	1884	111685	58.78%	70065	36.87%	8267	4.35%
35	1880	93902	62.28%	53315	35.36%	3553	2.36%
36	1876	72955	58.80%	48587	39.16%	2533	2.04%
37	1872	55708	61.27%	35211	38.73%	0	0.00%
38	1868	43722	60.88%	28096	39.12%	0	0.00%
39	1864	25055	59.06%	17367	40.94%	0	0.00%
40	1860	22069	63.53%	11920	34.31%	748	2.15%,

0

1 \

0 Preceded byCalifornia List of U.S. states by date of statehood
Admit...

2

0 Succeeded byOregon ,
Topics related to Minnesota Land of 10,000 Lakes \

0 .mw-parser-output .hlist dl,.mw-parser-output ...

1 .mw-parser-output .navbar{display:inline;font-...

2 Saint Paul (capital)

3 Topics

4 Society

.. ...

98	Federal district
99	Insular areas
100	Outlying islands
101	Indian reservations
102	International concessions

	Topics related to Minnesota Land of 10,000 Lakes.1
0	.mw-parser-output .hlist dl,.mw-parser-output ...
1	.mw-parser-output .navbar{display:inline;font-...
2	Saint Paul (capital)
3	Index Outline Biking/Cycling Cities Climate (C...
4	Abortion Culture Crime Demographics Economy Ed...
..	...
98	Washington, D.C.
99	American Samoa Guam Northern Mariana Islands P...
100	Baker Island Howland Island Jarvis Island John...
101	List of Indian reservations
102	Guantanamo Bay Pituffik

[103 rows x 2 columns],
.mw-parser-output .navbar{display:inline;font-size:88%;font-weight:normal}.mw-parser-output .navbar-collapse{float:left;text-align:left}.mw-parser-output .navbar-boxtext{word-spacing:0}.mw-parser-output .navbar ul{display:inline-block;white-space:nowrap;line-height:inherit}.mw-parser-output .navbar-brackets::before{margin-right:-0.125em;content:"["}.mw-parser-output .navbar-brackets::after{margin-left:-0.125em;content:"]"}.mw-parser-output .navbar li{word-spacing:-0.125em}.mw-parser-output .navbar a>span,.mw-parser-output .navbar a>abbr{text-decoration:inherit}.mw-parser-output .navbar-mini abbr{font-variant:small-caps;border-bottom:none;text-decoration:none;cursor:inherit}.mw-parser-output .navbar-ct-full{font-size:114%;margin:0 7em}.mw-parser-output .navbar-ct-mini{font-size:114%;margin:0 4em}vteState of Minnesota \

0	Saint Paul (capital)
1	Topics
2	Society
3	Regions
4	Largest cities pop. over 25,000
5	Counties
6	Attractions
7	Festivals

8

Other

9

Minnesota portal

```
.mw-parser-output .navbar{display:inline;font-size:88%;font-weight:normal}.mw-parser-output .navbar-collapse{float:left;text-align:left}.mw-parser-output .navbar-boxtext{word-spacing:0}.mw-parser-output .navbar ul{display:inline-block;white-space:nowrap;line-height:inherit}.mw-parser-output .navbar-brackets::before{margin-right:-0.125em;content:"[ "}.mw-parser-output .navbar-brackets::after{margin-left:-0.125em;content:" ]"}.mw-parser-output .navbar li{word-spacing:-0.125em}.mw-parser-output .navbar a>span,.mw-parser-output .navbar a>abbr{text-decoration:inherit}.mw-parser-output .navbar-mini abbr{font-variant:small-caps;border-bottom:none;text-decoration:none;cursor:inherit}.mw-parser-output .navbar-ct-full{font-size:114%;margin:0 7em}.mw-parser-output .navbar-ct-mini{font-size:114%;margin:0 4em}vteState of Minnesota.1
```

0

Saint Paul (capital)

1

Index Outline Biking/Cycling Cities Climate (C...

2

Abortion Culture Crime Demographics Economy Ed...

3

Arrowhead Boundary Waters Buffalo Ridge Centra...

4

Andover Apple Valley Austin Blaine Bloomington...

5

Aitkin Anoka Becker Beltrami Benton Big Stone ...

6

Festivals State Fair Other Mall of America

7

State Fair

8

Mall of America

9

Minnesota portal

,

0

1

0 Festivals State Fair

1 Other Mall of America,

vteMayors of cities with populations exceeding 100,000 in Minnesota

\

0

Jacob Frey (DFL) (Minneapolis) Melvin Carter (...)

vteMayors of cities with populations exceeding 100,000 in Minnesota.1

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Jacob Frey (DFL) (Minneapolis) Melvin Carter (...)

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vteProtected areas of Minnesota \
0 National
1 Parks
2 Monuments
3 Rivers
4 Scenic Trails
5 Wildlife Refuges
6 Wetland Management Districts
7 Forests
8 Natural Landmarks
9 Wilderness
10 State
11 Parks
12 Recreation Areas
13 Waysides
14 Forests
15 Scientific and Natural Areas
16 Local
17 Parks
18 Other
19 Minnesota Historical Society
20 Nature centers
21 Hiking
22 Minnesota Department of Natural Resources

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vteProtected areas of Minnesota.1
0 Parks Voyageurs Monuments Grand Portage Pipest...
1 Voyageurs
2 Grand Portage Pipestone
3 Mississippi National River and Recreation Area...
4 North Country Trail
5 Agassiz Big Stone Crane Meadows Glacial Ridge ...
6 Big Stone Detroit Lakes Fergus Falls Litchfiel...
7 Chippewa Superior
8 Ancient River Warren Channel Cedar Creek Ecosy...
9 Agassiz Boundary Waters Canoe Area Tamarac
10 Parks Afton Banning Bear Head Lake Beaver Cree...
11 Afton Banning Bear Head Lake Beaver Creek Vall...
12 Big Bog Cuyuna Country Garden Island Greenleaf...
13 Caribou Falls Devils Track Falls Flood Bay Ins...
14 Badoura Battleground Bear Island Beltrami Isla...
15 List of scientific and natural areas
16 Parks County and regional parks Three Rivers P...
17 County and regional parks Three Rivers Park Di...
18 Minnesota Historical Society Alexander Ramsey ...
19 Alexander Ramsey House Birch Coulee Battlefiel...
20 List of nature centers
21 List of hiking trails
22 Minnesota Department of Natural Resources ,

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0 Parks

1 Monuments

2 Rivers

3 Scenic Trails

4 Wildlife Refuges

5 Wetland Management Districts

6 Forests

7 Natural Landmarks

8 Wilderness

1

0 Voyageurs

1 Grand Portage Pipestone

2 Mississippi National River and Recreation Area...

3 North Country Trail

4 Agassiz Big Stone Crane Meadows Glacial Ridge ...

5 Big Stone Detroit Lakes Fergus Falls Litchfiel...

6 Chippewa Superior

7 Ancient River Warren Channel Cedar Creek Ecosy...

8 Agassiz Boundary Waters Canoe Area Tamarac ,

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0 Parks

1 Recreation Areas

2 Waysides

3 Forests

4 Scientific and Natural Areas

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0 Afton Banning Bear Head Lake Beaver Creek Vall...

1 Big Bog Cuyuna Country Garden Island Greenleaf...

2 Caribou Falls Devils Track Falls Flood Bay Ins...

3 Badoura Battleground Bear Island Beltrami Isla...

4 List of scientific and natural areas ,

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0 Parks County and regional parks Three Rivers Park Di...,

0 \

0 Minnesota Historical Society

1 Nature centers

2 Hiking

1

0 Alexander Ramsey House Birch Coulee Battlefiel...

1 List of nature centers

2 List of hiking trails ,

vteMidwestern United States \

0 Topics

1 States

2 Major cities

3 State capitals

		vteMidwestern United States.1	
0	Culture Geography Economy Government and polit...		
1	Ohio Indiana Michigan Illinois Missouri Iowa W...		
2	Chicago Detroit Minneapolis St. Paul St. Louis...		
3	Columbus Indianapolis Lansing Springfield Jeff...		
	vteNew France		vteNew
France.1			
0	History	French colonization of the Americas French col...	
1	Colonies	Acadia (1604–1713) Canada (1608–1763) Terre-Ne...	
2	Towns and villages	Acadie Port Royal Canada Quebec City Trois-Riv...	
3	Forts	List of French forts in North America Fort Rou...	
4	Governments	Canada Governor General Intendant Sovereign Co...	
5	Laws	Custom of Paris in New France Seignorial syst...	
6	Economy	Chemin du Roy Fur trade Coureur des bois Voyag...	
7	Society	Population 1666 census Habitants Canadiens Kin...	
8	Missionary groups	Jesuit missions Récollets Grey Nuns Ursulines ...	
9	Wars	Military of New France Military history of the...	
10	Category		
Category,			
		vteNew Spain (1521–1821) \	
0		Conflicts	
1	Spanish conquest of the Aztec Empire → Spanish...		
2	Conflicts with indigenous peoples during colon...		
3	Central government and administration		
4		Habsburg Spain	
5		Bourbon Spain	
6		Viceroy of New Spain	
7		Audiencias	
8		Captancies General	
9		Intendancy	
10		Politics	
11		Treaties	
12	Notable cities, provinces, and territories		
13		Cities	
14		Provinces and territories	
15		Other areas	
16	Explorers, adventurers and conquistadors		

17	Pre-New Spain explorers
18	Explorers and conquistadors
19	Catholic Church in New Spain
20	Spanish missions in the Americas
21	Friars, fathers, priests, and bishops
22	Other events
23	Society and culture
24	Indigenous peoples
25	Mesoamerican
26	Caribbean
27	California
28	Oasisamerica (Southwest US)
29	Aridoamerica
30	Southern Plains
31	Southeastern Woodlands
32	Filipinos
33	Others
34	Architecture
35	Trade and economy
36	People and classes
37	People
38	Category

	vteNew Spain (1521–1821).1
0	Spanish conquest of the Aztec Empire → Spanish...
1	Spanish conquest of the Aztec Empire → Spanish...
2	Mixtón War → Yaqui Wars → Chichimeca War → Phi...
3	Habsburg Spain Charles I Joanna of Castile Phi...
4	Charles I Joanna of Castile Philip II Philp II...
5	Philip V (also reigned after Louis I) Louis I ...
6	List of viceroys of New Spain
7	Guadalajara Captaincy General of Guatemala Man...
8	Cuba Guatemala Philippines Puerto Rico Santo D...
9	Havana New Orleans State of Mexico Chiapas Com...
10	Viceroy Gobernaciones Adelantado Captain gener...
11	Treaty of Tordesillas Treaty of Zaragoza Peace...
12	Cities Mexico City Veracruz Xalapa Puebla Tolu...
13	Mexico City Veracruz Xalapa Puebla Toluca Cuer...
14	Louisiana La Florida (Florida) Las Californias...
15	Spanish Formosa
16	Pre-New Spain explorers Christopher Columbus F...
17	Christopher Columbus Ferdinand Magellan Juan S...
18	Hernán Cortés Juan Ponce de León Nuño de Guzmá...
19	Spanish missions in the Americas Spanish missi...
20	Spanish missions in Arizona Spanish missions i...
21	Pedro de Gante Gerónimo de Aguilar Toribio de ...
22	Our Lady of Guadalupe Suppression of the Jesui...
23	Indigenous peoplesMesoamerican Aztecs Maya Hua...
24	Mesoamerican Aztecs Maya Huastec Mixtec P'urhé...

25 Aztecs Maya Huastec Mixtec P'urhépecha Totonac...
 26 Arawak Ciboney Guanahatabey
 27 Mission Indians Cahuilla Chumash Cupeño Juaneño...
 28 Akimel O'odham Apache Hopi Hualapai Navajo Pue...
 29 Acaxee Chichimeca Coahuiltecan Cochimí Cocopah...
 30 Caddo Comanche Lipan Apache Plains Apache Tonk...
 31 Indigenous people during De Soto's travels Apa...
 32 Negrito Igorot Mangyan Peoples of Palawan Ati ...
 33 Taiwanese indigenous peoples Chamorro people
 34 Spanish Colonial style by country Colonial Bar...
 35 Real Columbian exchange Manila galleon Triangu...
 36 Casta Peninsulares Criollo Indios Mestizo Cast...
 37 Juan Bautista de Anza Juan Rodríguez Cabrillo ...
 38 Category ,

0 \

0 Spanish conquest of the Aztec Empire → Spanish...
 1 Conflicts with indigenous peoples during colon...

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0 Spanish conquest of the Aztec Empire → Spanish...
 1 Mixtón War → Yaqui Wars → Chichimeca War → Phi... ,

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0 Habsburg Spain Charles I Joanna of Castile Philip II Philp II...

1 Bourbon Spain Philip V (also reigned after Louis I) Louis I ...

2 Viceroy of New Spain List of viceroys of New Spain

3 Audiencias Guadalajara Captaincy General of Guatemala Man...

4 Captancies General Cuba Guatemala Philippines Puerto Rico Santo D...

5 Intendancy Havana New Orleans State of Mexico Chiapas Com...

6 Politics Viceroy Gobernaciones Adelantado Captain gener...

7 Treaties Treaty of Tordesillas Treaty of Zaragoza Peace...,

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0 Cities

1 Provinces and territories

2 Other areas

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0 Mexico City Veracruz Xalapa Puebla Toluca Cuer...

1 Louisiana La Florida (Florida) Las Californias...

2 Spanish Formosa ,

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0 Pre-New Spain explorers
1 Explorers and conquistadors

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0 Christopher Columbus Ferdinand Magellan Juan S...
1 Hernán Cortés Juan Ponce de León Nuño de Guzmá... ,
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0 Spanish missions in the Americas
1 Friars, fathers, priests, and bishops
2 Other events

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0 Spanish missions in Arizona Spanish missions i...
1 Pedro de Gante Gerónimo de Aguilar Toribio de ...
2 Our Lady of Guadalupe Suppression of the Jesui... ,
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0 Indigenous peoples
1 Mesoamerican
2 Caribbean
3 California
4 Oasisamerica (Southwest US)
5 Aridoamerica
6 Southern Plains
7 Southeastern Woodlands
8 Filipinos
9 Others
10 Architecture
11 Trade and economy
12 People and classes
13 People

1
0 Mesoamerican Aztecs Maya Huastec Mixtec P'urhé...
1 Aztecs Maya Huastec Mixtec P'urhépecha Totonac...
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1 Caribbean

2 California
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 6 Southeastern Woodlands
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 6 Indigenous people during De Soto's travels Apa...
 7 Negrito Igorot Mangyan Peoples of Palawan Ati ...
 8 Taiwanese indigenous peoples Chamorro people ,
 vtePolitical divisions of the United States \
 0 List of states and territories
 1 States
 2 Federal district
 3 Insular areas
 4 Outlying islands
 5 Indian reservations
 6 International concessions

vtePolitical divisions of the United States.1
 0 List of states and territories
 1 Alabama Alaska Arizona Arkansas California Col...
 2 Washington, D.C.
 3 American Samoa Guam Northern Mariana Islands P...
 4 Baker Island Howland Island Jarvis Island John...
 5 List of Indian reservations
 6 Guantanamo Bay Pituffik ,
 Authority control databases \
 0 International
 1 National
 2 Geographic
 3 Academics
 4 Other

Authority control databases.1
 0 FAST ISNI VIAF
 1 Spain France BnF data Catalonia Germany Israel...
 2 MusicBrainz area
 3 CiNii
 4 NARA IdRef]