In [1]: **import** numpy **as** np import pandas as pd In [3]: import matplotlib.pyplot as plt ds=pd.read\_csv("D:\president\_heights.csv") In [4]: In [5]: ds Out[5]: name height(cm) order 0 George Washington 189 1 2 170 1 John Adams 2 3 Thomas Jefferson 189 4 3 James Madison 163 James Monroe 4 5 183 6 John Quincy Adams 5 171 6 7 Andrew Jackson 185 8 Martin Van Buren 168 7 8 9 William Henry Harrison 173 10 183 9 John Tyler 10 11 James K. Polk 173 12 11 Zachary Taylor 173 12 13 Millard Fillmore 175 14 178 13 Franklin Pierce 14 15 James Buchanan 183 Abraham Lincoln 193 16 15 17 Andrew Johnson 178 16 17 18 Ulysses S. Grant 173 18 19 Rutherford B. Hayes 174 20 James A. Garfield 183 19 20 21 Chester A. Arthur 183 23 21 Benjamin Harrison 168 22 25 William McKinley 170 23 26 Theodore Roosevelt 178 24 27 William Howard Taft 182 180 25 28 Woodrow Wilson 26 29 Warren G. Harding 183 27 30 Calvin Coolidge 178 28 31 Herbert Hoover 182 29 32 Franklin D. Roosevelt 188 30 33 Harry S. Truman 175 179 31 34 Dwight D. Eisenhower 32 35 John F. Kennedy 183 33 36 Lyndon B. Johnson 193 34 37 Richard Nixon 182 35 38 Gerald Ford 183 36 39 Jimmy Carter 177 37 40 Ronald Reagan 185 38 41 George H. W. Bush 188 42 188 39 Bill Clinton 40 43 George W. Bush 182 44 Barack Obama 41 185 ds.rename(columns={'height(cm)':'Height'}) order name Height Out[6]: George Washington 189 2 1 170 John Adams 2 3 Thomas Jefferson 189 3 4 James Madison 163 5 James Monroe 4 183 5 6 John Quincy Adams 171 7 6 Andrew Jackson 185 7 8 Martin Van Buren 168 173 8 9 William Henry Harrison 9 10 John Tyler 183 11 10 James K. Polk 173 12 173 11 Zachary Taylor 12 13 Millard Fillmore 175 14 Franklin Pierce 178 13 15 14 James Buchanan 183 16 Abraham Lincoln 193 15 16 17 Andrew Johnson 178 17 18 Ulysses S. Grant 173 19 18 Rutherford B. Hayes 174 20 James A. Garfield 183 19 21 20 Chester A. Arthur 183 23 168 21 Benjamin Harrison 22 25 William McKinley 170 26 178 23 Theodore Roosevelt 27 182 24 William Howard Taft 28 Woodrow Wilson 180 25 29 26 Warren G. Harding 183 Calvin Coolidge 27 30 178 31 28 Herbert Hoover 182 32 Franklin D. Roosevelt 188 29 33 Harry S. Truman 175 30 34 Dwight D. Eisenhower 179 31 32 35 John F. Kennedy 183 36 Lyndon B. Johnson 193 33 37 34 Richard Nixon 182 38 Gerald Ford 183 35 39 36 Jimmy Carter 177 37 40 Ronald Reagan 185 38 41 George H. W. Bush 188 42 Bill Clinton 188 39 40 43 George W. Bush 182 41 44 Barack Obama 185 ds.rename(columns={'height(cm)':'Height'},inplace=True) In [9]: ds Out[9]: order name Height 0 189 1 George Washington 2 John Adams 170 2 3 Thomas Jefferson 189 3 4 James Madison 163 4 5 James Monroe 183 John Quincy Adams 171 7 6 Andrew Jackson 185 8 7 Martin Van Buren 168 8 9 William Henry Harrison 173 10 John Tyler 183 11 173 10 James K. Polk 12 11 Zachary Taylor 173 12 13 Millard Fillmore 175 13 14 Franklin Pierce 178 15 James Buchanan 183 14 15 16 Abraham Lincoln 193 17 Andrew Johnson 178 16 17 18 Ulysses S. Grant 173 Rutherford B. Hayes 18 19 174 20 19 James A. Garfield 183 20 21 Chester A. Arthur 183 23 21 Benjamin Harrison 168 22 25 William McKinley 170 23 26 Theodore Roosevelt 178 24 27 William Howard Taft 182 25 28 Woodrow Wilson 180 29 183 26 Warren G. Harding 30 27 Calvin Coolidge 178 28 31 Herbert Hoover 182 29 32 Franklin D. Roosevelt 188 Harry S. Truman 33 175 30 31 34 Dwight D. Eisenhower 179 32 35 John F. Kennedy 183 33 36 Lyndon B. Johnson 193 37 182 34 Richard Nixon 35 38 Gerald Ford 183 36 39 Jimmy Carter 177 Ronald Reagan 185 38 41 George H. W. Bush 188 42 Bill Clinton 39 188 43 40 George W. Bush 182 44 41 Barack Obama 185 In [10]: ds.insert(3, "quality", "good") In [11]: ds Out[11]: order name Height quality 0 1 George Washington 189 good 2 1 John Adams 170 good 2 3 Thomas Jefferson 189 good 3 4 James Madison 163 good 4 5 James Monroe 183 good 5 6 John Quincy Adams 171 good 7 6 Andrew Jackson 185 good 7 8 Martin Van Buren 168 good 9 8 William Henry Harrison 173 good 9 10 John Tyler 183 good James K. Polk 10 11 173 good 12 173 11 Zachary Taylor good 13 12 Millard Fillmore 175 good 14 Franklin Pierce 178 13 good 14 15 James Buchanan 183 good 16 Abraham Lincoln 193 15 good 17 16 Andrew Johnson 178 good 18 Ulysses S. Grant 17 173 good Rutherford B. Hayes 18 19 174 good 19 20 James A. Garfield 183 good 21 20 Chester A. Arthur 183 good 21 23 Benjamin Harrison 168 good 25 22 William McKinley 170 good 23 26 178 Theodore Roosevelt good 24 27 William Howard Taft 182 good 28 Woodrow Wilson 25 180 good 29 26 Warren G. Harding 183 good 27 30 Calvin Coolidge 178 good 31 Herbert Hoover 28 182 good 29 32 Franklin D. Roosevelt 188 good 33 30 Harry S. Truman 175 good 34 Dwight D. Eisenhower 179 31 good 35 32 John F. Kennedy 183 good Lyndon B. Johnson 36 33 193 good 34 37 Richard Nixon good 38 Gerald Ford 183 35 good 36 39 Jimmy Carter 177 good Ronald Reagan 40 185 37 good George H. W. Bush 38 41 188 good 39 42 Bill Clinton 188 good 43 40 George W. Bush 182 good 44 Barack Obama 185 41 good In [13]: ds.drop(columns=['quality']) Out[13]: order name Height George Washington 0 1 189 2 John Adams 170 1 3 Thomas Jefferson 2 189 3 4 James Madison 163 5 4 James Monroe 183 5 6 John Quincy Adams 171 7 185 6 Andrew Jackson 7 8 Martin Van Buren 168 8 9 William Henry Harrison 173 9 10 John Tyler 183 11 10 James K. Polk 173 11 12 173 Zachary Taylor 13 Millard Fillmore 175 12 13 14 Franklin Pierce 178 14 15 James Buchanan 183 15 16 Abraham Lincoln 193 17 178 16 Andrew Johnson Ulysses S. Grant 18 173 17 19 Rutherford B. Hayes 18 174 James A. Garfield 19 20 183 21 183 20 Chester A. Arthur 21 23 168 Benjamin Harrison 25 170 22 William McKinley 23 26 Theodore Roosevelt 178 24 27 William Howard Taft 182 25 28 Woodrow Wilson 180 29 26 Warren G. Harding 183 27 30 Calvin Coolidge 178 31 28 Herbert Hoover 182 29 32 Franklin D. Roosevelt 188 33 175 30 Harry S. Truman 31 34 Dwight D. Eisenhower 179 35 183 32 John F. Kennedy 33 36 Lyndon B. Johnson 193 37 34 Richard Nixon 182 38 Gerald Ford 183 35 39 177 36 Jimmy Carter 37 Ronald Reagan 185 38 41 George H. W. Bush 188 39 42 Bill Clinton 188 George W. Bush 40 43 182 41 44 Barack Obama 185 In [14]: ds Out[14]: order name Height quality 0 189 1 George Washington good 2 1 John Adams 170 good 2 3 Thomas Jefferson 189 good 3 James Madison 163 good 4 5 James Monroe 183 good 5 6 John Quincy Adams 171 good 7 185 6 Andrew Jackson good Martin Van Buren 168 good 8 9 William Henry Harrison 173 good 9 10 John Tyler 183 good 10 11 James K. Polk 173 good 11 12 Zachary Taylor 173 good 13 Millard Fillmore 175 12 good 13 Franklin Pierce 178 good 14 15 James Buchanan 183 good 15 16 Abraham Lincoln 193 good 17 Andrew Johnson 178 good 16 17 18 Ulysses S. Grant 173 good Rutherford B. Hayes 19 174 18 good 19 20 James A. Garfield 183 good 20 21 Chester A. Arthur 183 good 23 21 Benjamin Harrison 168 good 22 25 William McKinley 170 good 23 26 Theodore Roosevelt 178 good 24 27 William Howard Taft 182 good 25 28 Woodrow Wilson 180 good Warren G. Harding 29 183 26 good 27 30 Calvin Coolidge 178 good 28 31 182 Herbert Hoover good 29 32 Franklin D. Roosevelt 188 good 30 33 Harry S. Truman 175 good 31 34 Dwight D. Eisenhower 179 good 35 183 32 John F. Kennedy good 33 36 Lyndon B. Johnson 193 good 34 37 Richard Nixon 182 good 35 38 Gerald Ford 183 good 36 39 Jimmy Carter 177 good 40 37 Ronald Reagan 185 good 38 41 George H. W. Bush 188 good 42 Bill Clinton 188 good 43 George W. Bush good 182 44 Barack Obama 185 good In [16]: ds.drop(columns=["quailty"],inplace=True) KeyError Traceback (most recent call last) ~\AppData\Local\Temp\ipykernel\_3160\1856824728.py in <module> ----> 1 ds.drop(columns=["quailty"],inplace=True) ~\anaconda3\lib\site-packages\pandas\util\\_decorators.py in wrapper(\*args, \*\*kwargs) 309 stacklevel=stacklevel, 310 --> 311 return func(\*args, \*\*kwargs) 312 313 return wrapper ~\anaconda3\lib\site-packages\pandas\core\frame.py in drop(self, labels, axis, index, columns, level, inplace, errors) 4955 weight 1.0 4956 return super().drop( -> 4957 4958 labels=labels, 4959 axis=axis, ~\anaconda3\lib\site-packages\pandas\core\generic.py in drop(self, labels, axis, index, columns, level, inplace, errors) for axis, labels in axes.items(): 4265 4266 if labels is not None: -> 4267 obj = obj.\_drop\_axis(labels, axis, level=level, errors=errors) 4268 if inplace: 4269 ~\anaconda3\lib\site-packages\pandas\core\generic.py in \_drop\_axis(self, labels, axis, level, errors, consolidate, only\_slice) new\_axis = axis.drop(labels, level=level, errors=errors) 4310 new\_axis = axis.drop(labels, errors=errors) -> 4311 4312 indexer = axis.get\_indexer(new\_axis) 4313 ~\anaconda3\lib\site-packages\pandas\core\indexes\base.py in drop(self, labels, errors) if mask.any(): 6659 6660 if errors != "ignore": raise KeyError(f"{list(labels[mask])} not found in axis") -> 6661 6662 indexer = indexer[~mask] return self.delete(indexer) 6663 KeyError: "['quailty'] not found in axis" In [18]: ds['Height']<175 False Out[18]: True False 3 True 4 False 5 True 6 False 7 True 8 True 9 False 10 True 11 True 12 False 13 False 14 False 15 False 16 False 17 True 18 True 19 False 20 False 21 True 22 True 23 False 24 False 25 False 26 False 27 False 28 False 29 False 30 False 31 False 32 False 33 False 34 False 35 False 36 False 37 False 38 False 39 False 40 False 41 False Name: Height, dtype: bool In [19]: ds[ds['Height']>=175] Out[19]: order name Height quality George Washington 1 189 good 2 3 Thomas Jefferson 189 good 4 5 James Monroe 183 good 7 Andrew Jackson 185 6 good 10 9 John Tyler 183 good 12 13 Millard Fillmore 175 good 13 14 Franklin Pierce 178 good 15 James Buchanan 183 14 good 15 16 Abraham Lincoln 193 good good 17 Andrew Johnson 178 16 20 19 James A. Garfield 183 good 20 21 Chester A. Arthur 183 good Theodore Roosevelt 23 26 178 good 24 27 William Howard Taft 182 good 28 25 Woodrow Wilson 180 good 26 29 Warren G. Harding 183 good 27 30 Calvin Coolidge 178 good 28 31 Herbert Hoover 182 good 32 Franklin D. Roosevelt 29 188 good 30 33 Harry S. Truman 175 good 31 34 Dwight D. Eisenhower 179 good 32 35 John F. Kennedy 183 good 36 33 Lyndon B. Johnson 193 good 34 37 Richard Nixon 182 good 35 38 Gerald Ford 183 good 39 177 36 Jimmy Carter good 37 40 Ronald Reagan 185 good 38 41 George H. W. Bush 188 good 42 Bill Clinton 39 188 good 40 43 George W. Bush 182 good **41** 44 Barack Obama 185 In [23]: ds[((ds['Height']>=175)&(ds['Height']<180))]</pre> name Height quality Out[23]: order Millard Fillmore 12 13 175 good 14 13 Franklin Pierce 178 good 16 17 Andrew Johnson 178 good 23 26 Theodore Roosevelt 178 good Calvin Coolidge 27 30 178 good 33 30 Harry S. Truman 175 good 34 Dwight D. Eisenhower 179 good 36 39 Jimmy Carter 177 good ds.isnull() In [24]: Out[24]: order name Height quality **0** False False False False **1** False False False False 2 False False False False **3** False False False False 4 False False False False **5** False False False False **6** False False False False **7** False False False False 8 False False False False False **9** False False False **10** False False False False **11** False False False False **12** False False False False **13** False False False False **14** False False False False **15** False False False False **16** False False False False False **17** False False False **18** False False False False **19** False False False False **20** False False False False 21 False False False False **22** False False False False 23 False False False False **24** False False False False False **25** False False False **26** False False False False **27** False False False False False **28** False False False **29** False False False False **31** False False False False **32** False False False False **33** False False False False **34** False False False False False **35** False False False **36** False False False False **37** False False False False **38** False False False False **39** False False False False **40** False False False False 41 False False False False In [25]: ds Out[25]: order name Height quality 0 George Washington 1 189 good 2 John Adams 170 good 2 3 Thomas Jefferson 189 good 3 James Madison 163 good 4 5 James Monroe 183 good 6 John Quincy Adams 171 good 6 7 Andrew Jackson 185 good Martin Van Buren 168 good 8 9 William Henry Harrison 173 good good 10 John Tyler 183 11 James K. Polk 10 173 good 11 12 Zachary Taylor 173 good 12 13 Millard Fillmore 175 good 13 14 Franklin Pierce 178 good 14 15 James Buchanan 183 good 15 16 Abraham Lincoln 193 good 16 17 Andrew Johnson 178 good 17 18 Ulysses S. Grant 173 good 19 Rutherford B. Hayes 174 18 good 19 20 James A. Garfield 183 good 20 21 183 Chester A. Arthur good 21 23 Benjamin Harrison 168 good 22 25 William McKinley 170 good 23 26 Theodore Roosevelt 178 good 24 27 William Howard Taft 182 good good 25 28 Woodrow Wilson 180 26 29 Warren G. Harding 183 good Calvin Coolidge 27 30 178 good 28 31 182 Herbert Hoover good 32 Franklin D. Roosevelt good 30 33 Harry S. Truman 175 good 179 32 35 John F. Kennedy 183 good 33 36 Lyndon B. Johnson 193 good 37 34 Richard Nixon 182 good Gerald Ford 35 38 183 good 36 39 Jimmy Carter 177 good 37 40 Ronald Reagan 185 good George H. W. Bush 38 41 188 good 39 42 Bill Clinton 188 good 40 43 George W. Bush 182 good good 41 44 Barack Obama 185 In [31]: sum(ds['Height']) Out[31]: import seaborn as sns In [32]: In [39]: mark=[99,99,99,99,99,99] subject=['DBMS','PYTHON','JAVA','CLOUD','ML','MC'] plt.bar(subject,mark) plt.xlabel("Subjects") plt.ylabel("Mark") plt.ylim(0,200) plt.show() 200 175 150 125 Mark 100 75 50 25 0 CLOUD DBMS **PYTHON** JAVA ML MC Subjects In [40]: sns.barplot(x='name', y='Height', data=ds) <AxesSubplot:xlabel='name', ylabel='Height'> Out[40]: 200 175 150 125 Height 100 75 50 25 **dialogica de la company de la** name