```
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                                                                                                                                                                      Untitled12.ipynb - Colab
     import pandas as pd
     dt={"name":["jyothi","chandu","swomya","harsha","lakshmi","menaka","aishwarya","anusha","keerthana","nayana","nisha","poornima","harish","manoj","karthik","abhi","abhi","adithya","akash","darshan","gap
           "semister":["6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th","6th",
           "average marks": [87,88,83,76,56,77,65,78,69,83,72,84,89,76,86,86,78,65,82,73,65,57,46,83,78,67,69,79,86,57,45,67,87,65,46,89,76,56,87]\}
     print(dt)
      ج {'name': ['jyothi', 'chandu', 'swomya', 'harsha', 'lakshmi', 'menaka', 'aishwarya', 'anusha', 'bharathi', 'chandrika', 'keerthana', 'nayana', 'nisha', 'poornima', 'harish', 'manoj', 'karthik', 'abhi', 'adithya',
     df=pd.DataFrame(dt)
     print(df)
      \overline{\mathbf{T}}
                                name age semister average marks
                             jyothi
                                          18
                                                      6th
                                                                              87
                             chandu
                                                      6th
                                          18
                                                                             83
            2
                             swomya
                                          18
                                                      6th
                                          18
                                                                             76
            3
                             harsha
                                                      6th
                                                                             56
                           lakshmi
                                          18
                                                      6th
                             menaka
                                          18
                                                      6th
                                                                             77
                        aishwarya
                                          18
                                                      6th
                                                                             65
                             anusha
                                          18
                                                      6th
                                                                             78
             8
                                          18
                                                                             69
                          bharathi
                                                      6th
             9
                         chandrika
                                          18
                                                      6th
                                                                             83
                         keerthana
             10
                                          18
                                                      6th
                                                                             72
                                                                             84
            11
                             nayana
                                          18
                                                      6th
                                                                             89
            12
                                          18
                                                      6th
                             nisha
            13
                                                                             76
                          poornima
                                          18
                                                      6th
            14
                            harish
                                          18
                                                      6th
                                                                             86
            15
                                          18
                                                                              86
                              manoj
                                                      6th
             16
                           karthik
                                         18
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             17
                               abhi
                                         18
                                                                              65
             18
                           adithya 18
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                                                      6th
                                                                             73
             19
                              akash
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                                                      6th
             20
                                                                             65
                           darshan
                                         18
                                                      6th
             21
                                          18
                                                                             57
                          gayathri
                                                      6th
             22
                                          18
                                                                             46
                           halappa
                                                      6th
             23
                        manjunath
                                          18
                                                                              83
                                                      6th
             24
                           sumanth
                                          18
                                                      6th
                                                                             78
                                                                             67
             25
                              vijay
                                          18
                                                      6th
             26
                           koushik
                                          18
                                                      6th
                                                                             69
            27
                           manojss
                                                                             79
                                          18
                                                      6th
            28
                           manojsh
                                          18
                                                      6th
                                                                             86
             29
                              kiran
                                          18
                                                      6th
                                                                             57
             30
                     shakunthala
                                                                             45
                                          18
                                                      6th
             31
                           nirmala
                                          18
                                                                              67
                                                                             87
            32
                           amrutha
                                          18
                                                      6th
            33
                                                                             65
                                          18
                       keerthanas
                                                      6th
             34
                                                                             46
                                         18
                                                      6th
                             varsha
            35
                                                                             89
                           pradeep
                                         18
                                                      6th
             36
                                                                             76
                              rohan
                                          18
                                                      6th
             37
                  gurubasavarai
                                         18
                                                      6th
                                                                              56
                                                                             87
             38
                        gurumurty
                                         18
                                                      6th
     df=pd.read_csv("Data.csv")
     print(df)
      \overline{\mathbf{T}}
                                name age semester average marks
                           jyothi
                                                                             87
                                                      6th
                                          18
                                                                              88
                             chandu
                                          18
                                                      6th
                                          18
                                                      6th
                                                                              83
                             swomya
                             harsha
                                          18
                                                      6th
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                                          18
                           lakshmi
                                                      6th
                                                                              56
                                                      6th
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             6
                        aishwarya
                                                      6th
                                                                              78
                             anusha
                                                      6th
                          bharathi
                                                      6th
                                                                              69
                        chandrika
                                                                              83
                        keerthana
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                            nayana
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            12
                              nisha
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                                                      6th
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            13
                          poornima
                                         18
                                                      6th
            14
                            harish
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                                                      6th
                                                                              86
            15
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                              manoj
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                           karthik
                                                                              78
             16
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                                                      6th
             17
                               abhi
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                                                      6th
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             18
                           adithya
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                                                      6th
                                                                              82
                                                                             73
             19
                             akash
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                                                      6th
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                           darshan
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                                                      6th
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             21
                          gayathri
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                                                      6th
             22
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                          halappa
                                         18
                                                      6th
             23
                                                                              83
                        manjunath 18
                                                      6th
                           sumanth 18
             24
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                             vijay 18
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                           koushik 18
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                           manojss 18
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                           manojsh 18
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                             kiran 18
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                     shakunthala
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                           nirmala
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                                                                             67
             32
                           amrutha
                                          18
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                                                                             87
                                                                             65
             33
                       keerthanas
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                             varsha
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                                                      6th
                                                                             89
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                                                      6th
                           pradeep
                                          18
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             36
                              rohan
                                                      6th
                                         18
            37 gurubasavaraj 18
                                                                              56
                                                      6th
             38
                        gurumurty 18
                                                      6th
     print(df.info())
      <class 'pandas.core.frame.DataFrame'>
             RangeIndex: 39 entries, 0 to 38
             Data columns (total 4 columns):
              # Column
                                          Non-Null Count Dtype
                                          -----
              0 name
                                          39 non-null
                                                                  object
                                          39 non-null
             1
                    age
                                                                  int64
                                          39 non-null
              2 semester
                                                                  object
              3 average marks 39 non-null
                                                                  int64
             dtypes: int64(2), object(2)
             memory usage: 1.3+ KB
             None
     df.index
      RangeIndex(start=0, stop=39, step=1)
     df.columns
      → Index(['name', 'age', 'semester', 'average marks'], dtype='object')
     print(df["name"])
      → 0
                              jyothi
                               chandu
```

 $https://colab.research.google.com/drive/1r8qe0fNvRJ_Qmcj2AeeW6axX5v8SosLK\#scrollTo=FnVWeyFdulWY\&printMode=true$

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```
swomya
    3
               harsha
               lakshmi
               menaka
    6
             aishwarya
    7
               anusha
    8
              bharathi
    9
             chandrika
    10
             keerthana
    11
               nayana
    12
                nisha
    13
              poornima
    14
               harish
    15
                manoj
    16
               karthik
    17
                 abhi
    18
               adithya
    19
                akash
    20
               darshan
    21
              gayathri
    22
               halappa
    23
             manjunath
    24
               sumanth
    25
                vijay
    26
               koushik
    27
               manojss
    28
               manojsh
    29
                kiran
    30
           shakunthala
    31
               nirmala
    32
               amrutha
    33
            keerthanas
    34
               varsha
    35
               pradeep
    36
                rohan
    37
         gurubasavaraj
    38
             gurumurty
    Name: name, dtype: object
print(df["average marks"])
→ 0
         87
         88
    1
    2
         83
    3
         76
         56
    5
         77
    6
         65
         78
    7
    8
         69
    9
         83
    10
         72
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         86
    29
         57
    30
         45
    31
         67
         87
    32
    33
    34
         46
    35
         89
    36 76
    37 56
    38 87
    Name: average marks, dtype: int64
print(df["name"].unique())
→ ['jyothi ' 'chandu' 'swomya' 'harsha' 'lakshmi' 'menaka' 'aishwarya'
      'anusha' 'bharathi' 'chandrika' 'keerthana' 'nayana' 'nisha' 'poornima'
     'harish' 'manoj' 'karthik' 'abhi' 'adithya' 'akash' 'darshan' 'gayathri'
     'halappa' 'manjunath' 'sumanth' 'vijay' 'koushik' 'manojss' 'manojsh'
     'kiran' 'shakunthala' 'nirmala' 'amrutha' 'keerthanas' 'varsha' 'pradeep'
     'rohan' 'gurubasavaraj' 'gurumurty']
print(df["average marks"].value_counts())
⇒ average marks
    65
        4
    87
         3
    83
        3
    76
         3
    78
         3
    86
        3
    56
        2
    69
        2
    67
        2
    46
         2
    89
         2
    57
         2
    73
         1
    79
         1
    84
         1
    82
         1
    88
         1
    72
        1
    77 1
    45 1
    Name: count, dtype: int64
print(df["average marks"].sort_values(ascending=True))
<del>→</del> 30
    22
         46
    34
         46
    4
         56
    37
         56
    29
         57
    21
         57
    33
         65
    6
         65
    20 65
    17 65
    25 67
    31 67
    26
         69
    8
         69
    10
         72
    19
         73
    13
         76
```

df=pd.DataFrame(dt)

df

⋺		name	age	semister	average	marks	
	0	jyothi	18	6th		87	ıl.
	1	chandu	18	6th		88	+0
	2	swomya	18	6th		83	
	3	harsha	18	6th		76	
	4	lakshmi	18	6th		56	
	5	menaka	18	6th		77	
	6 a	ishwarya	18	6th		65	
	7	anusha	18	6th		78	
	8	bharathi	18	6th		69	
	9 c	handrika	18	6th		83	
1	10 k	eerthana	18	6th		72	
,	11	nayana	18	6th		84	
1	12	nisha	18	6th		89	
1	13 p	ooornima	18	6th		76	
1	14	harish	18	6th		86	
1	15	manoj	18	6th		86	
1	16	karthik	18	6th		78	
1	17	abhi	18	6th		65	
1	18	adithya	18	6th		82	
1	19	akash	18	6th		73	
2	20	darshan	18	6th		65	
2	21	gayathri	18	6th		57	
2	22	halappa	18	6th		46	
2	23 m	anjunath	18	6th		83	
2	24	sumanth	18	6th		78	
2	25	vijay	18	6th		67	
2	26	koushik	18	6th		69	
2	27	manojss	18	6th		79	
2	28	manojsh	18	6th		86	
2	29	kiran	18	6th		57	
3	30 sha	kunthala	18	6th		45	
3	31	nirmala	18	6th		67	
3	32	amrutha	18	6th		87	
3	33 ke	erthanas	18	6th		65	
3	34	varsha	18	6th		46	
3	35	pradeep	18	6th		89	
3	36	rohan	18	6th		76	
3	37 gurub	asavaraj	18	6th		56	
3	38 g	urumurty	18	6th		87	

View recommended plots New interactive sheet) Next steps: Generate code with df

import matplotlib.pyplot as plt

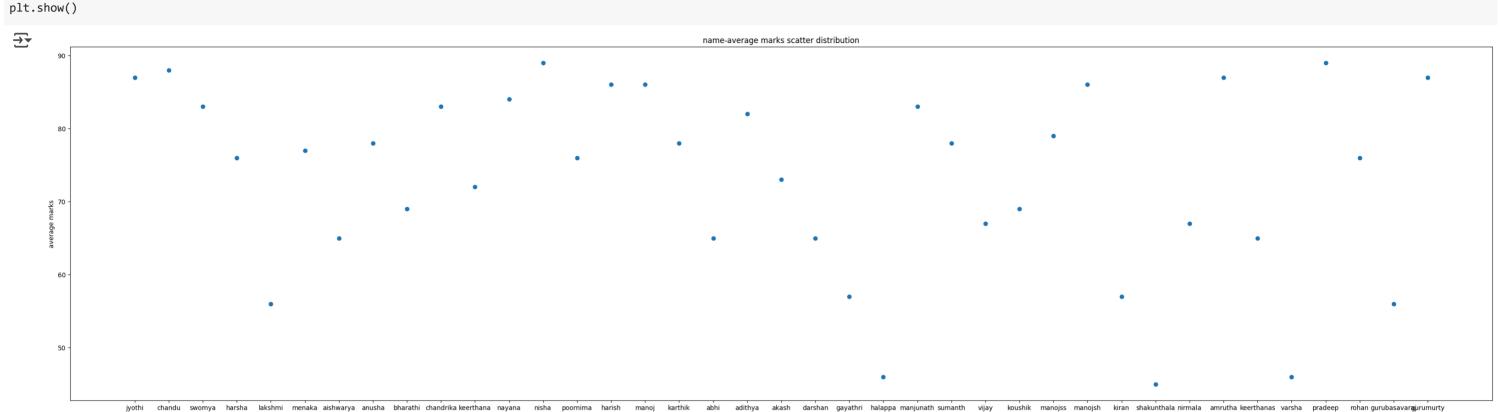
df=pd.DataFrame(dt)

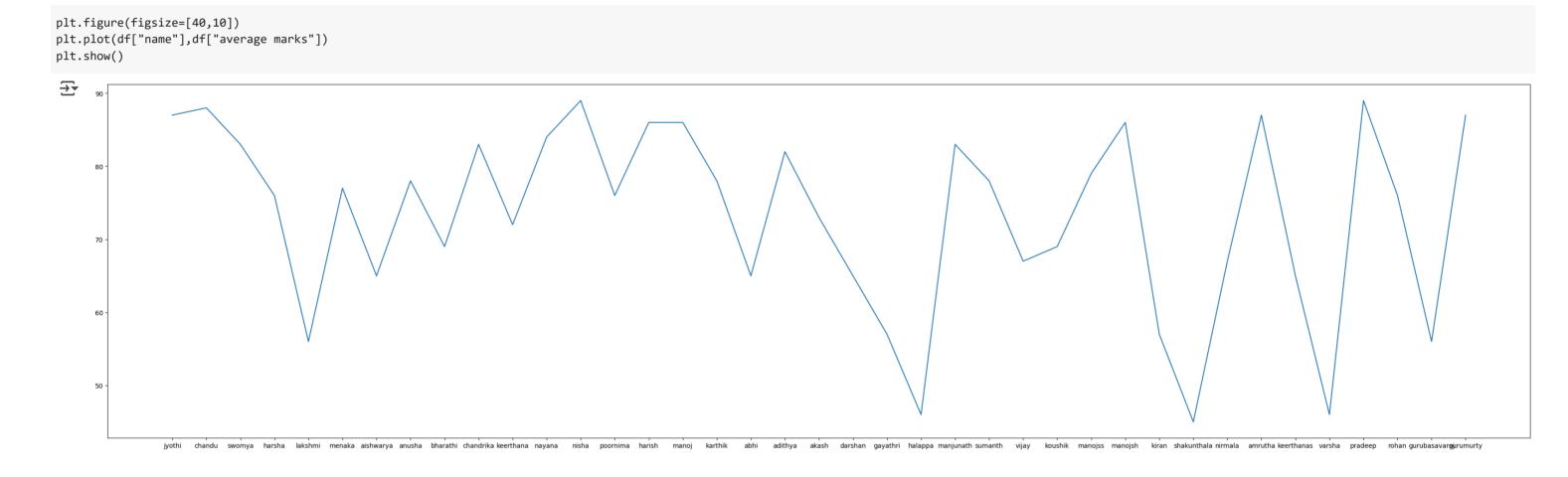
print(df)

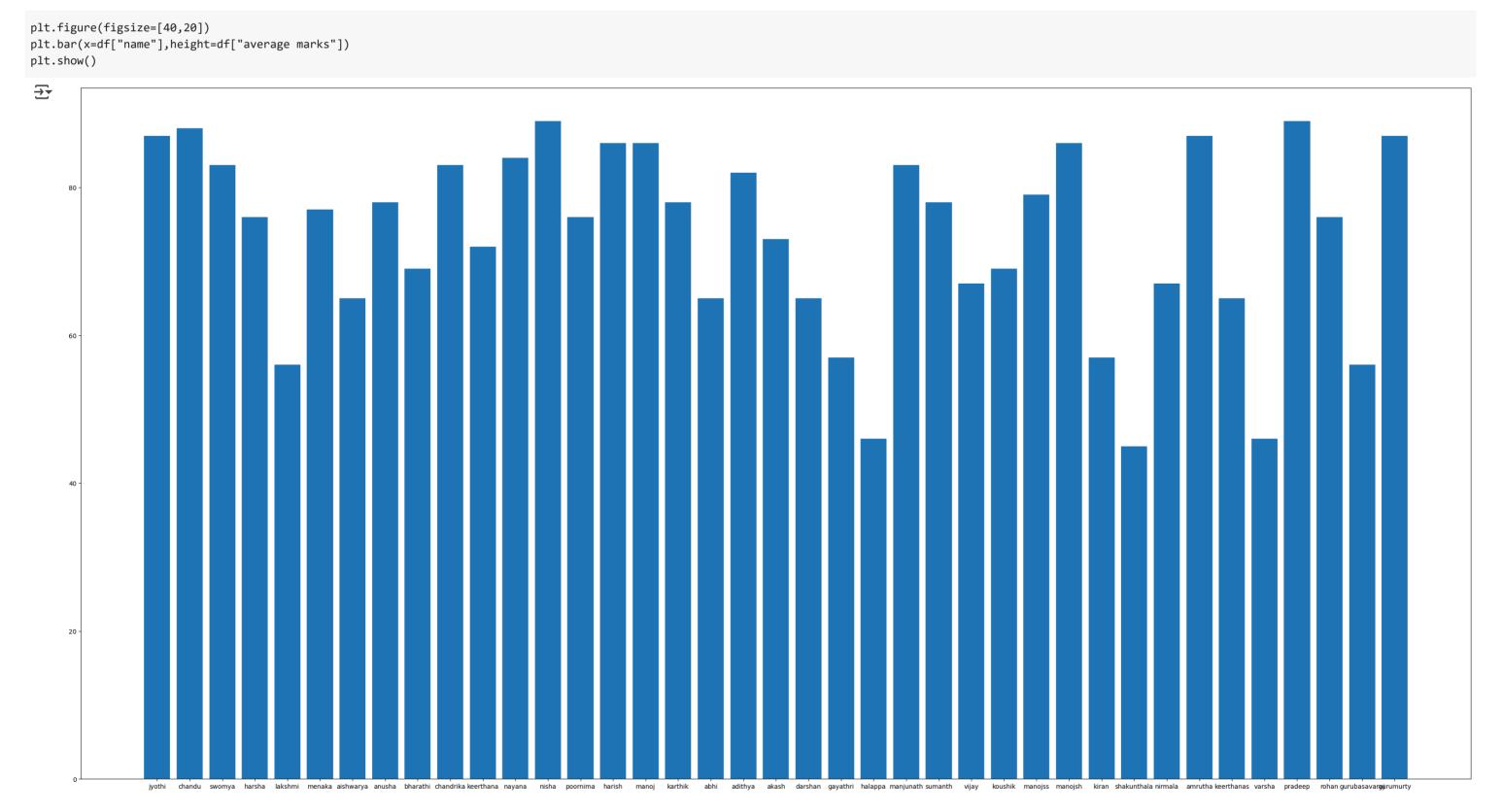
```
→
              name age semister average marks
                           6th
                                         87
             jyothi 18
             chandu
                            6th
                                         88
                    18
   2
             swomya
                    18
                           6th
                                         83
             harsha
                    18
                            6th
                                         76
            lakshmi
                    18
                            6th
                                         56
                                         77
             menaka
                            6th
                                         65
          aishwarya
                    18
                            6th
                    18
                                         78
             anusha
                            6th
           bharathi
                    18
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          chandrika
                    18
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          keerthana
                    18
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   12
             nisha 18
                            6th
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   13
           poornima 18
                            6th
   14
            harish 18
                                         86
                            6th
   15
             manoj 18
                                         86
                            6th
            karthik 18
   16
                           6th
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   17
              abhi 18
                           6th
                                         65
            adithya 18
                                         82
   18
                            6th
   19
             akash 18
                            6th
                                         73
                                         65
   20
            darshan 18
                            6th
           gayathri 18
                                         57
   21
                            6th
   22
            halappa 18
                                         46
                           6th
   23
          manjunath 18
                                         83
                           6th
   24
            sumanth 18
                           6th
                                         78
```

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        25
                   vijay 18
                                  6th
                                                 67
        26
                 koushik
                          18
                                  6th
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        27
                 manojss
                          18
                                  6th
                                                 79
        28
                                                 86
                 manojsh
                          18
                                  6th
        29
                                                 57
                   kiran
                          18
                                  6th
        30
                                                 45
             shakunthala 18
                                  6th
       31
                                                 67
                          18
                                  6th
                 nirmala
        32
                                                 87
                          18
                                  6th
                 amrutha
       33
              keerthanas
                          18
                                  6th
                                                 65
        34
                  varsha
                          18
                                  6th
                                                 46
        35
                 pradeep
                          18
                                  6th
                                                 89
        36
                                                 76
                   rohan
                          18
                                  6th
       37 gurubasavaraj
                                                 56
                          18
                                  6th
        38
                                                 87
               gurumurty 18
```

plt.figure(figsize=[40,10])
plt.title("name-average marks scatter distribution")
plt.xlabel("names")
plt.ylabel("average marks")
plt.scatter(x=df["name"],y=df["average marks"])







plt.show()



