

assi1-a-pandas-1

October 21, 2024

```
[ ]: [ ]: import pandas as pd
      dict1 = {
          "Names" : ['Adhya','sakshi','ishwar', 'tejas','siddhesh'],
          "city" : ['akot','dhule','sambhajinagar','ratnagiri','pune'],
          "marks" : [90,87,94,98,99]
      }
      data = pd.DataFrame(dict1)
      data
```

```
[ ]:
```

	Names	city	marks
0	Adhya	akot	90
1	sakshi	dhule	87
2	ishwar	sambhajinagar	94
3	tejas	ratnagiri	98
4	siddhesh	pune	99

```
[ ]: import numpy as np
```

```
[ ]: data.to_csv('friends.csv')
```

```
[ ]: data.to_csv('friends_index_false.csv',index=False)
```

```
[ ]: data.head(2)
```

```
[ ]:
```

	Names	city	marks
0	Adhya	akot	90
1	sakshi	dhule	87

```
[ ]: data.tail(3)
```

```
[ ]:
```

	Names	city	marks
2	ishwar	sambhajinagar	94
3	tejas	ratnagiri	98
4	siddhesh	pune	99

```
[ ]: print(pd.options.display.max_rows)
```

60

```
[ ]: print(data.to_string())
```

	Names	city	marks
0	Adhya	akot	90
1	sakshi	dhule	87
2	ishwar	sambhajinagar	94
3	tejas	ratnagiri	98
4	siddhesh	pune	99

```
[ ]: data.loc[3]
```

```
[ ]: Names
```

	tejas
city	ratnagiri
marks	98

Name: 3, dtype: object

```
[ ]: data.info()
```

<class 'pandas.core.frame.DataFrame'>

RangeIndex: 5 entries, 0 to 4

Data columns (total 3 columns):

#	Column	Non-Null Count	Dtype
---	----	-----	----
0	Names	5 non-null	object
1	city	5 non-null	object
2	marks	5 non-null	int64

dtypes: int64(1), object(2)

memory usage: 248.0+ bytes

```
[ ]: data.describe()
```

```
[ ]:
```

	marks
count	5.000000
mean	93.600000
std	5.128353
min	87.000000
25%	90.000000
50%	94.000000
75%	98.000000
max	99.000000

```
[ ]: data.size
```

```
[ ]: 15
```

```
[ ]: data['Names'].dtype
```

```
[ ]: dtype('O')
```

```
[ ]: data.index = ['first','second','third','fourth','fifth']
```

```
[ ]: data
```

```
[ ]:
```

	Names	city	marks
first	Adhya	akot	90
second	sakshi	dhule	87
third	ishwar	sambhajinagar	94
fourth	tejas	ratnagiri	98
fifth	siddhesh	pune	99

```
[ ]: dic = {"name":['python','C','java','C++'],
          "por":[10,223,43,49],
          "rank":[1,2,3,4]}
      var = pd.Series(dic)
      print(var)
      print(type(var))
      print(var[2])
```

```
name    [python, C, java, C++]
por      [10, 223, 43, 49]
rank     [1, 2, 3, 4]
```

```
dtype: object
<class 'pandas.core.series.Series'>
[1, 2, 3, 4]
```

```
<ipython-input-22-0e59dc8d5c77>:8: FutureWarning: Series.__getitem__ treating
keys as positions is deprecated. In a future version, integer keys will always be
treated as labels (consistent with DataFrame behavior). To access a value by
position, use `ser.iloc[pos]`
print(var[2])
```

```
[ ]: newdf = pd.DataFrame(np.random.rand(334))
```

```
[ ]: newdf
```

```
[ ]:
```

	0
0	0.911242
1	0.546549
2	0.980070
3	0.839567
4	0.228103
..	...
329	0.552858
330	0.660450

```
331 332 333
0
.
```

```
[334 rows x 1 columns]
```

```
[ ]: type(newdf)
```

```
[ ]:
```

```
pandas.core.frame.DataFrame
```

```
[ ]: df df sv('friend s.csv')
```

```
[ ]:
```

	Unnamed: 0	Names	city	marks
0	0	Adhya	akot	90
1	1	sakshi	dhule	87
2	2	ishwar	sambhajanagar	94
3	3	tejas	ratnagiri	98
4	4	siddhesh	pune	99

```
[ ]: data.size
```

```
[ ]: 15
```

```
[ ]: data['Names'].isnull().sum()
```

```
[ ]: 0
```

```
[ ]: df1 = pd.read_csv('friends.csv')
```

```
new_df1 = df1.dropna()
print(new_df1.to_string())
```

```
Unnamed: 0
```

	Unnamed: 0	Names	city	m
0	0	Adhya	akot	
1	1	sakshi	dhule	
2	2	ishwar	sambhajanagar	
3	3	tejas	ratnagiri	
4	4	siddhesh	pune	

```
df1.dropna(inplace = True)
```

```
print(df1.to_string())
```

```
Unnamed: 0
```

	Unnamed: 0	Names	city	marks
0	0	Adhya	akot	90
1	1	sakshi	dhule	87
2	2	ishwar	sambhajanagar	94
3	3	tejas	ratnagiri	98
4	4	siddhesh	pune	99


```
[ ]: import pandas as pd
mydata = {
    'Language' : ['C++','C','Java','Python','Kotlin'],
    'subject' : ['oops','cpps','java','cpps2','anroid'],
    'credit': [4,6,12,7,2]
}
set = pd.DataFrame(mydata)
set
```

```
[ ]: 
```

	Language	subject	credit	
0		C++	oops	4
1		C	cpps	6
2		Java	java	12
3	Python		cpps2	7
4	Kotlin		anroid	2

```
[ ]: print(set[['Language','subject']])
```

```

Language subject
0 1 2 3 4
C++ oops
C cpps
Java java
Python cpps2
Kotlin anroid
```

```
[ ]: variable = set
print(variable)
set['subject',1]= 'DSA'
print(set)
```

	Language	subject	credit (1, subject)	(subject, 1)
0	C++	oops	4	DSA
1	C	cpps	6	DSA
2	Java	java	12	DSA
3	Python	cpps2	7	DSA
4	Kotlin	anroid	2	DSA

	Language	subject	credit (1, subject)	(subject, 1)
0	C++	oops	4	DSA
1	C	cpps	6	DSA
2	Java	java	12	DSA
3	Python	cpps2	7	DSA
4	Kotlin	anroid	2	DSA

```
[ ]: row1 = set.loc[3]
```

```
row2 =
```

[]: Language

Name: 3, dtype: bool

[]:

subject
credit
(1, subject)
(subject, 1)

True

True

True

True

True