test Documentation

Release 0.0.1

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```
# import numpy as np
import pandas as pd
print "Using {} , version {}".format(pd.__name__,pd.__version__)
```

```
Using pandas , version 0.23.4
```

CHAPTER 1

Dataframe

```
df = pd.DataFrame()
print(df)
```

```
Empty DataFrame
Columns: []
Index: []
```

```
dict = {'name':["Tom", "Bob", "Mary", "James"],
        'age': [18, 30, 25, 40],
        'city':["Beijing", "ShangHai","GuangZhou", "ShenZhen"]}

df = pd.DataFrame(dict)
```

```
df
```

```
.dataframe tbody tr th {
    vertical-align: top;
}

.dataframe thead th {
    text-align: right;
}
```

```
index = pd.Index(["Tom", "Bob", "Mary", "James"],name = 'person')
cols = ['age','city']
data = [[18,'Beijing'],
        [30,'ShangHai'],
        [25,'GuangZhou'],
        [40,'ShenZhen']]

df =pd.DataFrame(index = index,data =data,columns = cols)
df
```

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```

2.Dataframe

1.1 2.1 columns

1.1.1 add column

```
dict = {'name':["Tom", "Bob", "Mary", "James"],
        'age': [18, 30, 25, 40],
        'city':["Beijing", "ShangHai","GuangZhou", "ShenZhen"]}

df = pd.DataFrame(dict)
df
```

```
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}
```

```
df['country'] = 'USA'
df
```

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}
```

```
df['adress'] = df['country']
df
```

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}
```

1.1.2 Change column values

```
df['country'] = 'China'
df
```

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}
```

```
df['adress'] = df['city']+','+ df['country']
df
```

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}

.dataframe thead th {
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}
```

1.1.3 Delete columns

```
df.drop('country',axis=1, inplace=True)
del df['city']
df
```

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.dataframe thead th {
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}
```

1.1.4 Select columns

```
df['age']
```

```
0    18
1    30
2    25
3    40
Name: age, dtype: int64
```

```
df.name
```

```
0       Tom
1       Bob
2      Mary
3     James
Name: name, dtype: object
```

```
df[['age','name']]
```

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}
```

```
df.columns
```

```
Index([u'age', u'name', u'adress'], dtype='object')
```

```
# df.columns = ['Age','Name','Adress']
# df
```

```
# df.rename(index = str, columns = {'age':'Age','name':'Name','adress':'Adress'})
```

```
df.rename(str.capitalize, axis='columns',inplace =True)
df
```

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}
```

1.1.5 Set column value with conditions

```
df['Group'] = 'elderly'
df.loc[df['Age']<=18,'Group']='young'
df.loc[(df['Age'] >18) & (df['Age'] <= 30),'Group']='middle_aged'
df
```

```
.dataframe tbody tr th {
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}

.dataframe thead th {
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}
```

CHAPTER 2

Indices and tables

- genindex
- modindex
- search