|  |  |
| --- | --- |
| Table summary and access: | df.columns  df.index  df.info  df.head  df.dtypes  df.s.astype()  df.describe |
| Table Statistics: | sum()  mean()  quantile()  cumsum()  cumprod()  value\_counts()  idxmax()  idxmin()  pd.cut()  describe()  cut()  qcut() |
| Boolean Reduction: | empty  any()  all()  bool() |
| Basic function applications: | pipe()  apply()  agg()/transform()  applymap() |
| Sorting: | sort\_index()  sort\_values()  searchsorted()  nsmallest()  nlargest() |
| Slicing: | s/df.loc  s/df.iloc  s/df.A or df['A']  df.groupby(by=['A']).sum().loc[lambda df:df['C']>0]  s/df.iat[int position]  s/df.at[row, col]  s.sample() |
| Indexing: | df.columns.levels  col/index.get\_level\_values()  remove\_unused\_levels()  reindex()  reindex\_like()  align()  drop()  rename()  set\_axis()  df.columns.set\_levels()  df.set\_index()  rename\_axis()  reset\_index()  df.swaplevel()  df.reorder\_levels() |
| Boolean Indexing: | Series.map()  series.mask()  series.where()  df.mask()  df.where()  s.isin([])  df.isin([]) |
| MultiIndex Slicing: | df.loc[(),()]  dfmi.loc(axis=0)[:,:,['C1','C3']]  df.loc[slice()]  dfmi.xs  df.loc[pd.IndexSlicer[:,:,:],pd.IndexSlicer[:,:]] |
| Mergin, Concat: | pd.concat()  df.append()  df/pd.merge()  df.combine\_first()  df.update(df2) |
| Missing Data | df.isna()  df.notna()  df.fillna()  df.dropna()  s/df.interpolate()  s/df.replace() |
| Statistical Functions | sr/df.pct\_change() - percent change  sr/df.corr()  sr.df.diff()  Window Functions:  s/df.rolling().sum()  s/df.expanding()  s/df.ewm() - exponentially weighted window |