# In[1]:

import pandas as pd

# In[2]:

# In[3]:

# In[4]:

myDF=pd.read\_csv('test.csv')

# In[5]:

myDF.head()

# In[6]:

myCols = ['ID', 'Range', 'Value', 'Machine Type', 'Zip code']

# In[7]:

myDF=pd.read\_csv('test.csv', header=None, names=myCols)

# In[8]:

myDF.head()

# In[9]:

myDF=pd.read\_csv('test.csv', header=None, names=myCols, skiprows=1)

# In[10]:

myDF.head()

# In[11]:

type(myDF)

# In[12]:

myDF['Value']

# In[13]:

myDF.Value

# In[14]:

myDF['Brand']=myDF['Machine Type'] + myDF['Zip code']

# In[15]:

myDF.head()

# In[16]:

myDF['Total']=myDF['Range'] \* myDF['Value']

# In[17]:

myDF.head()

# In[18]:

myDF.head()

# In[19]:

myDF.describe()

# In[20]:

myDF.describe

# In[21]:

myDF.shape

# In[22]:

myDF.dtypes

# In[23]:

myDF.describe(include=['object'])

# In[24]:

myDF.rename(columns = {'ID':'My ID'})

# In[25]:

myDF.head()

# In[26]:

myDF.rename(columns = {'ID':'My ID'}, inplace=True)

# In[27]:

myDF.head()

# In[28]:

myDF.columns

# In[29]:

myNewCol=['id', 'range', 'value', 'machine type', 'zip code', 'brand', 'total']

# In[30]:

myDF.columns = myNewCol

# In[31]:

myDF.columns

# In[32]:

myDF.columns = myDF.columns.str.replace(' ','\_')

# In[33]:

myDF.columns

# In[34]:

myDF.drop(['brand', 'total'], axis=1, inplace=True)

# In[35]:

myDF.head()

# In[36]:

myDF.drop([3, 5], axis=0, inplace=True)

# In[37]:

myDF.head()

# In[38]:

myDF.value.sort\_values()

# In[39]:

myDF.sort\_values('value')

# In[40]:

myDF.sort\_values(['range','value'], ascending=[True, False])

# In[41]:

myDF[(myDF.range >= 250) & (myDF.range <= 350)].sort\_values('range')

# In[42]:

myDF.loc[(myDF.range >= 250) & (myDF.range <= 350) & (myDF.machine\_type=='H') , ['id','value', 'machine\_type']]

# In[43]:

myDF[myDF['machine\_type'].isin(['H','R','X'])]

# In[44]:

myDF.dtypes

# In[45]:

import numpy as np

# In[46]:

myDF.select\_dtypes(include=[np.number])