```
import pandas as pd

# Read file, Variable Name is used
as Index (row names)
df=pd.read_csv('responses.csv',
index_col='Name')

# Change the name of the index
df.index.name='Person'
# Print dimensions of the
spreadsheet
print df.shape
df=df.iloc[18:]                         (170, 25)
print df.shape                          (152, 25)

df['index'] = df.index
df.drop_duplicates(subset='index',
inplace=True)
df.drop('index', axis=1,
inplace=True)

# Print the first five rows to
inspect the table
df.head(5)

# Print a summary of the dataset
df.describe()

                                        6.77536231884
print df['Math'].mean()                 6.77536231884
print df.Math.mean()

courses=df.columns[4:7]+
df.columns[9:16]                        Index([u'Biology', u'Crafts',
print courses                           u'Dutch', u'Economy', u'English',
                                        u'Geography',        u'Gym',
                                        u'History', u'Math',
                                        u'Physics_Chemistry'],
                                        dtype='object')

coursesDataFrame = df[courses]          y = 5 names, x = all courses
coursesDataFrame.head(5)                and averages

courseMean=coursesDataFrame.mean()
courseMean.sort(ascending=False)
print courseMean

courseMean.plot(kind='bar');

coursMeanPP=coursesDataFrame.mean(
axis=1)
coursMeanPP.sort(ascending=False)
coursMeanPP.plot(kind='bar');

inverse=df[courses].transpose()         swiched courses against people

inverse.mean().sort_values(ascendi      average per person
ng=False)[:20]

df[courses].transpose().corr().hea      people to people and their corr
d(5)                                    value

course_corr_matrix =                    course to courses and their corr
df[courses].corr()                      value
```