example

```
print('{0:15s} {1:>15s} {2:>15s} {3:>10s}'.format(str1, str2, str3, str4))
print('{0:15s} {1:15.5f} {2:15.5f} {3:15f}'.format(value1, val2, val3, val4))


def conversion_rate(df):
    """ function to calculate conversion rates for home, search and payment page"""
    rates = []
    tmp = df[~df['page_home'].isnull()]
    rates.append(1 - tmp['page_search'].isnull().sum() / len(tmp))

    tmp = df[~df['page_search'].isnull()]
    rates.append(1 - tmp['page_payment'].isnull().sum() / len(tmp))

    tmp = df[~df['page_payment'].isnull()]
    rates.append(1 - tmp['page_confirmation'].isnull().sum() / len(tmp))

    return rates



male_rates = conversion_rate(data[data['sex'] == 'Male'])
female_rates = conversion_rate(data[data['sex'] == 'Female'])
names = ['home', 'search', 'payment']
print('{0:^10s} | {1:^10s} | {2:^10s}'.format('Page', 'Male', 'Female'))
print('-' * 40)
for name, male_rate, female_rate in zip(names, male_rates, female_rates):
    print('{0:10s} | {1:10.6f} | {2:10.6f}'.format(name, male_rate, female_rate))

'''
   Page    |  Desktop   |   Mobile
----------------------------------------
home       |   0.500000 |   0.500000
search     |   0.100000 |   0.200000
payment    |   0.049834 |   0.100000
'''
```

```
countries = [name for name in data['country'].unique() if name is not np.nan]

print('{0:15s} {1:>15s} {2:>15s} {3:>10s}'.format('Country', 'Test Rate', 'Control Rate', 'P-Val
print('-' * 65)
for country in countries:
    test_val = data[(data['country'] == country) & (data['test'] == 1)]['conversion'].values
    cont_val = data[(data['country'] == country) & (data['test'] == 0)]['conversion'].values

    test_mean = test_val.mean()
    cont_mean = cont_val.mean()
    p_val = ttest_ind(test_val, cont_val, equal_var=False).pvalue

    print('{0:15s} {1:15.5f} {2:15.5f} {3:10f}'.format(country, test_mean, cont_mean, p_val))

'''
Country               Test Rate    Control Rate    P-Value
-----------------------------------------------------------------
Mexico                  0.05119         0.04949   0.165544
Venezuela               0.04898         0.05034   0.573702
'''
```