**Conclusion: Negative correlation**

**Correlation analysis of all class levels of five projects**

**For Metric 1 Statement Coverage and Metric 4 Cyclomatic complexity (1663 data sets in total)**

**Pearson correlation coefficient is -0.0439**

**Spearman correlation coefficient is -0.3556**

**For Metric 2 Branch Coverage and Metric 4 Cyclomatic Complex (a total of 1174 sets of data, because the data of the N/A branch coverage is to be removed)**

**Pearson correlation coefficient is -0.0354**

**Spearman correlation coefficient is -0.2705**

**Correlation analysis of project lang class level**

**For Metric 1 Statement Coverage and Metric 4 Cyclomatic complexity (a total of 246 sets of data)**

**Pearson correlation coefficient is 0.0329**

**Spearman correlation coefficient is -0.2116**

**For Metric 2 Branch Coverage and Metric 4 Cyclomatic Complex (a total of 162 sets of data, because the data of the N/A branch coverage is to be removed)**

**Pearson correlation coefficient is 0.0131**

**Spearman correlation coefficient is -0.2985**

**Correlation analysis of project codec class level**

**For Metric 1 Statement Coverage and Metric 4 Cyclomatic complexity (a total of 89 sets of data)**

**Pearson correlation coefficient is 0.0548**

**Spearman correlation coefficient is -0.2605**

**For Metric 2 Branch Coverage and Metric 4 Cyclomatic complexity (a total of 59 sets of data, because the data of the N/A branch coverage is to be removed)**

**Pearson correlation coefficient is -0.0542**

**Spearman correlation coefficient is -0.3509**

**Correlation analysis of project collections**

**For Metric 1 Statement Coverage and Metric 4 Cyclomatic complexity (a total of 474 sets of data)**

**Pearson correlation coefficient is -0.0262**

**Spearman correlation coefficient is -0.3780**

**For Metric 2 Branch Coverage and Metric 4 Cyclomatic complexity (a total of 319 sets of data, because the data of the N/A branch coverage is to be removed)**

**Pearson correlation coefficient is -0.0068**

**Spearman correlation coefficient is -0.2614**

**Correlation analysis of project configuration class level**

**For Metric 1 Statement Coverage and Metric 4 Cyclomatic complexity (a total of 306 sets of data)**

**Pearson correlation coefficient is -0.1032**

**Spearman correlation coefficient is -0.3694**

**For Metric 2 Branch Coverage and Metric 4 Cyclomatic Complex (a total of 197 sets of data, because the data of the N/A branch coverage is to be removed)**

**Pearson correlation coefficient is -0.1221**

**Spearman correlation coefficient is -0.3177**

**Correlation analysis of the project jfree class level (the data of this project can not get a good correlation coefficient)**

**For Metric 1 Statement Coverage and Metric 4 Cyclomatic complexity (a total of 548 data sets)**

**Pearson correlation coefficient is 0.0407**

**Spearman correlation coefficient is -0.0655**

**For Metric 2 Branch Coverage and Metric 4 Cyclomatic Complex (a total of 437 sets of data, because the data of the N/A branch coverage is to be removed)**

**Pearson correlation coefficient is 0.0161**

**Spearman correlation coefficient is 0.0958**

**Correlation analysis of all class levels of four projects**

**For Metric 1 Statement Coverage and Metric 4 Cyclomatic complexity (a total of 1115 data sets, Jfree data is excluded)**

**Pearson correlation coefficient is 0.0116**

**Spearman correlation coefficient is -0.3271**

**For Metric 2 Branch Coverage and Metric 4 Cyclomatic complexity (a total of 737 sets of data, because Jfree data is excluded)**

**Pearson correlation coefficient is -0.0100**

**Spearman correlation coefficient is -0.2753**