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Nota di contenuto	Cover; Title Page; Copyright; Contents; Preface; Part I Introduction; Chapter 1 Statistical hypothesis testing; 1.1 Theory of statistical hypothesis testing; 1.2 Testing statistical hypothesis with SAS and R; 1.2.1 Programming philosophy of SAS and R; 1.2.2 Testing in SAS and R-An example; 1.2.3 Calculating p-values; 1.3 Presentation of the statistical tests; References; Part II Normal Distribution; Chapter 2 Tests on the mean; 2.1 One-sample tests; 2.1.1 z-test; 2.1.2 t-test; 2.2 Two-sample tests; 2.2.1 Two-sample z-test; 2.2.2 Two-sample pooled t-test; 2.2.3 Welch test; 2.2.4 Paired z-test 2.2.5 Paired t-testReferences; Chapter 3 Tests on the variance; 3.1 One-sample tests; 3.1.1 x2-test on the variance (mean known); 3.1.2 x2-test on the variance (mean unknown); 3.2 Two-sample tests; 3.2.1 Two-sample F-test on variances of two populations; 3.2.2 t-test on variances of two dependent populations; References; Part III Binomial Distribution; Chapter 4 Tests on proportions; 4.1 One-sample tests; 4.1.1 Binomial test; 4.2 Two-sample tests; 4.2.1 z-test for the difference of two proportions (unpooled variances); 4.2.2 z-test for the equality between two proportions (pooled variances)

4.3 K-sample tests
 4.3.1 K-sample binomial test; References; Part IV Other Distributions; Chapter 5 Poisson distribution; 5.1 Tests on the Poisson parameter; 5.1.1 z-test on the Poisson parameter; 5.1.2 Exact test on the Poisson parameter; 5.1.3 z-test on the difference between two Poisson parameters; References; Chapter 6 Exponential distribution; 6.1 Test on the parameter of an exponential distribution; 6.1.1 z-test on the parameter of an exponential distribution; Reference; Part V Correlation; Chapter 7 Tests on association; 7.1 One-sample tests
 7.1.1 Pearson's product moment correlation coefficient
 7.1.2 Spearman's rank correlation coefficient; 7.1.3 Partial correlation; 7.2 Two-sample tests; 7.2.1 z-test for two correlation coefficients (independent populations); References; Part VI Nonparametric Tests; Chapter 8 Tests on location; 8.1 One-sample tests; 8.1.1 Sign test; 8.1.2 Wilcoxon signed-rank test; 8.2 Two-sample tests; 8.2.1 Wilcoxon rank-sum test (Mann-Whitney U test); 8.2.2 Wilcoxon matched-pairs signed-rank test; 8.3 K-sample tests; 8.3.1 Kruskal-Wallis test; References; Chapter 9 Tests on scale difference
 9.1 Two-sample tests
 9.1.1 Siegel-Tukey test; 9.1.2 Ansari-Bradley test; 9.1.3 Mood test; References; Chapter 10 Other tests; 10.1 Two-sample tests; 10.1.1 Kolmogorov-Smirnov two-sample test (Smirnov test); References; Part VII Goodness-of-Fit Tests; Chapter 11 Tests on normality; 11.1 Tests based on the EDF; 11.1.1 Kolmogorov-Smirnov test (Lilliefors test for normality); 11.1.2 Anderson-Darling test; 11.1.3 Cramer-von Mises test; 11.2 Tests not based on the EDF; 11.2.1 Shapiro-Wilk test; 11.2.2 Jarque-Bera test; References; Chapter 12 Tests on other distributions; 12.1 Tests based on the EDF
 12.1.1 Kolmogorov-Smirnov test

Sommario/riassunto

A comprehensive guide to statistical hypothesis testing with examples in SAS and R. When analyzing datasets the following questions often arise: Is there a short hand procedure for a statistical test available in SAS or R? If so, how do I use it? If not, how do I program the test myself? This book answers these questions and provides an overview of the most common statistical test problems in a comprehensive way, making it easy to find and perform an appropriate statistical test. A general summary of statistical tests