DescriptiveStat data: ArrayList<Double> data_array: double[] name: String getData(): ArrayList<Double> setData(ArrayList<Double> data): void getName(): String setName(String name): void mean(): double standardDeviation(): double sampleSize(): double populationVariance(): double populationStandardDeviation(): double information(): String findzTable(double z): double findtTable(double alpha, int degreesOfFreedom, boolean twoTail): double

extends

LinearRegression

b0: double

b1: double

alpha: double

sumX: double

xVar: double

xValues: double[]

xName: String

calculateParameters(): void simpleLinearRegression(): String

predict(double x): double

linearRegressionExplain(): String

simpleLinearRegressionExplain(): String

calculateSSE(): double

calculateSST(): double

calculateSSR(): double

calculateRSquared(): double

calculateCorrelationCoeff(): double

coefficientDetermination(): String

coefficientDeterminationExplain(): String testSlopeVarianceKnown(): String

testSlopeVarianceKnownExplain(): String

testSlopeVarianceUnknown(): String

testSlopeVarianceUnknownExplain(): String

confidenceIntervalVarKnown(double xOld) : String confidenceIntervalVarKnownExplain(): String

confidenceIntervalVarUnknown(double xOld): String

confidenceIntervalVarUnknownExplain(): String

predictionIntervalVarUnknown(double xNew) : String

HypothesisTest

a: double

avg: double

var: double

n: int

hypo: double xbar: double

pValue: double

direct: String

getAlpha(): double getVar(): double

getXbar(): double

getNum(): int

setAlpha(double alpha): void

setVar(double var): void

setNum(int num): void setXbar(double xbar) : void

setNullHypo(double hypo, String direct): void

calculatePValue(): void

calculatePValue(): double

analysis(double t): void

instruction2(): void

instruction3(): void

tAnalysis(double t): void instruction(): void instruction1(): void

ANOVA

blocks: double[][] treatments: double[][]

a: double

data: ArrayList<Double>

generateBlocks(double[][] treatments):

double[][]

getData1(): ArrayList<Double>

getAlpha(): double

setAlpha(double alpha): void

gettreatments(): double[][]

setTreatments(double[][] groups): void

getBlocks(): double[][]

flatten(double[][] arrays): double[]

overallMean(): double totalSumOfSquares(): double

betweenTreatmentsSumOfSquaresofCRD():

double

mean(double[] array) : double

betweenTreatmentsSumOfSquaresofRBD():

double

betweenBlockSumOfSquares(): double errorSumOfSquaresofRBD(): double

errorSumOfSquaresofCRD(): double calculateDFTRofCRD(): int

calculateDFEofCRD(): int

calculateDFBLofRBD(): int calculateDFTRofRBD(): int

calculateDFEofRBD(): int calculateDFTotalofRBD(): int

calculateMSTRofCRD(): double

instruction2(): void instruction3(): void instruction4(): void instruction5(): void conclusion(): void instruction6(): void instruction7(): void instruction8(): void

calculateMSEofCRD(): double

calculateMSBLofRBD(): double

calculateMSTRofRBD(): double

calculateMSEofRBD(): double

calculateFValueofCRD(): double

calculateFValueofRBD(): double

printCRDTable(): void

printRBDTable(): void

explainRBD(): String

explainCRD(): String

ftable01(): void

ftable005(): void

ftable001(): void

instruction1(): void

explainANOVA(): String

DescriptiveStat data: ArrayList<Double> data_array: double[] name: String getData(): ArrayList<Double> setData(ArrayList<Double> data): void getName(): String setName(String name): void mean(): double standardDeviation(): double sampleSize(): double populationVariance(): double populationStandardDeviation(): double information(): String findzTable(double z): double findtTable(double alpha, int degreesOfFreedom, boolean twoTail) : double

HypothesisTest a: double avg: double var: double n: int hypo: double xbar: double pValue: double direct: String getAlpha(): double getVar(): double getXbar(): double getNum(): int setAlpha(double alpha): void setVar(double var): void setNum(int num): void setXbar(double xbar) : void setNullHypo(double hypo, String direct) : void calculatePValue(): void calculatePValue(): double analysis(double t): void tAnalysis(double t): void instruction(): void instruction1(): void instruction2(): void

instruction3(): void

ANOVA blocks: double[][] treatments: double[][] a: double data: ArrayList<Double> generateBlocks(double[][] treatments): calculateMSEofCRD(): double calculateMSBLofRBD(): double double[][] getData1(): ArrayList<Double> calculateMSTRofRBD(): double calculateMSEofRBD(): double getAlpha(): double calculateFValueofCRD(): double setAlpha(double alpha): void gettreatments(): double[][] calculate FValue of RBD(): double setTreatments(double[][] groups): void printCRDTable(): void getBlocks(): double[][] printRBDTable(): void explainANOVA(): String flatten(double[][] arrays): double[] explainRBD(): String overallMean(): double explainCRD(): String totalSumOfSquares(): double between Treatments Sum Of Squares of CRD(): | ftable 01(): void ftable005(): void mean(double[] array) : double ftable001(): void betweenTreatmentsSumOfSquaresofRBD(): instruction1(): void instruction2(): void betweenBlockSumOfSquares(): double instruction3(): void errorSumOfSquaresofRBD(): double instruction4(): void instruction5(): void errorSumOfSquaresofCRD(): double calculateDFTRofCRD(): int conclusion(): void calculateDFEofCRD(): int instruction6(): void calculateDFBLofRBD(): int instruction7(): void calculateDFTRofRBD(): int instruction8(): void calculateDFEofRBD(): int calculateDFTotalofRBD(): int calculateMSTRofCRD(): double

LinearRegression b0: double b1: double alpha: double sumX: double xVar: double xValues: double[] xName: String calculateParameters(): void simpleLinearRegression(): String predict(double x): double linearRegressionExplain(): String simpleLinearRegressionExplain(): String calculateSSE(): double calculateSST(): double calculateSSR(): double calculateRSquared(): double calculateCorrelationCoeff(): double coefficientDetermination(): String coefficientDeterminationExplain(): String testSlopeVarianceKnown(): String testSlopeVarianceKnownExplain(): String testSlopeVarianceUnknown(): String testSlopeVarianceUnknownExplain(): String confidenceIntervalVarKnown(double xOld) : String confidenceIntervalVarKnownExplain(): String confidenceIntervalVarUnknown(double xOld) : String confidenceIntervalVarUnknownExplain(): String predictionIntervalVarUnknown(double xNew) : String