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

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

confidence Interval Var Known Explain (): String

confidenceIntervalVarUnknown(double xOld): String

confidenceIntervalVarUnknownExplain(): String

predictionIntervalVarUnknown(double xNew): String

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

calculate MSE of CRD (): double

calculateMSBLofRBD(): double

calculateMSTRofRBD(): double

calculateMSEofRBD(): double

calculateFValueofCRD(): double

calculateFValueofRBD(): double

printCRDTable(): void

printRBDTable(): void

explainANOVA(): String

explainRBD(): String

explainCRD(): String

ftable01(): void

ftable005(): void

ftable001(): void instruction1(): void

instruction2(): void

instruction3(): void

instruction4(): void

instruction5(): void

conclusion(): void

instruction6(): void

instruction7(): void

instruction8(): void