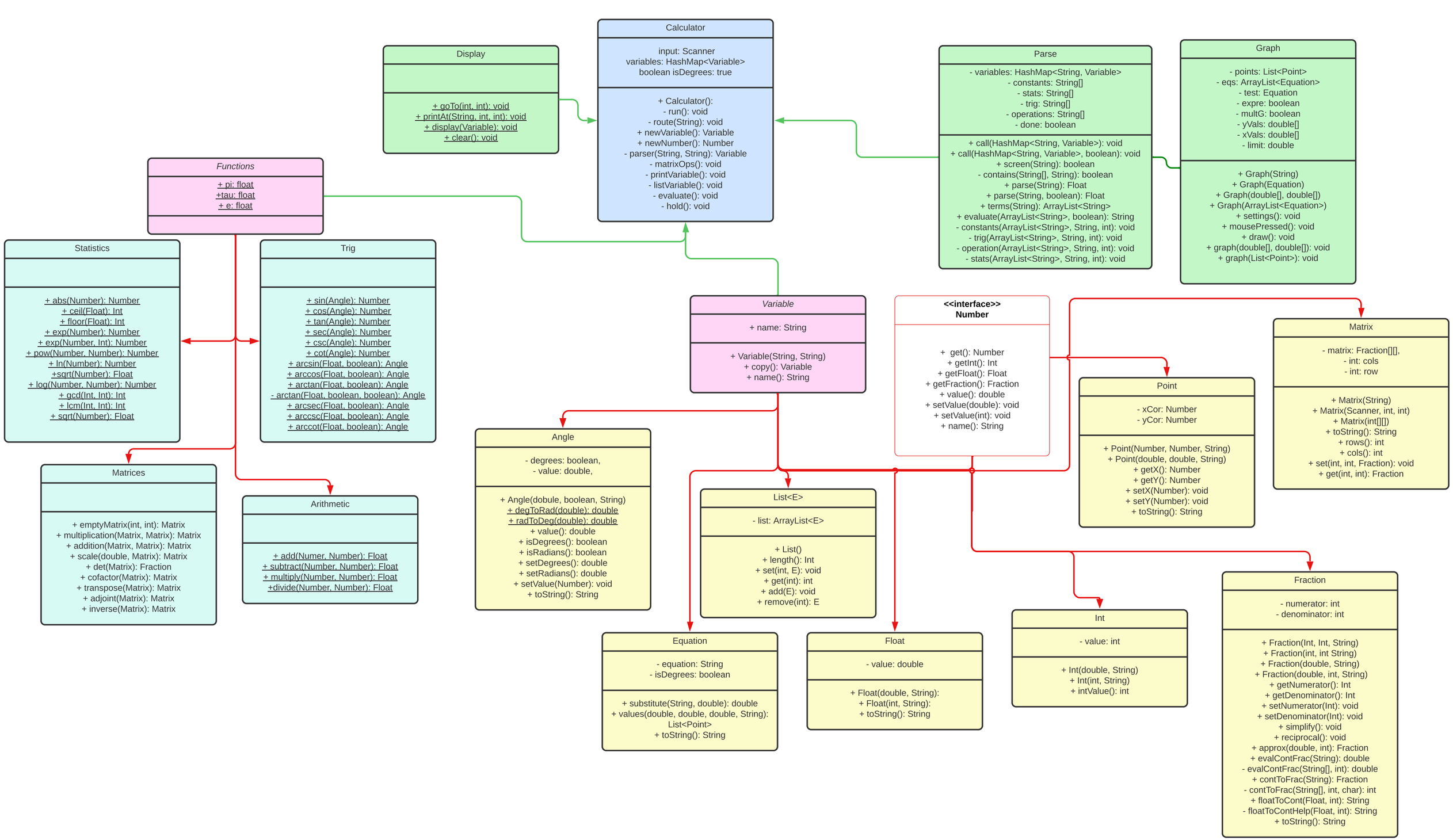
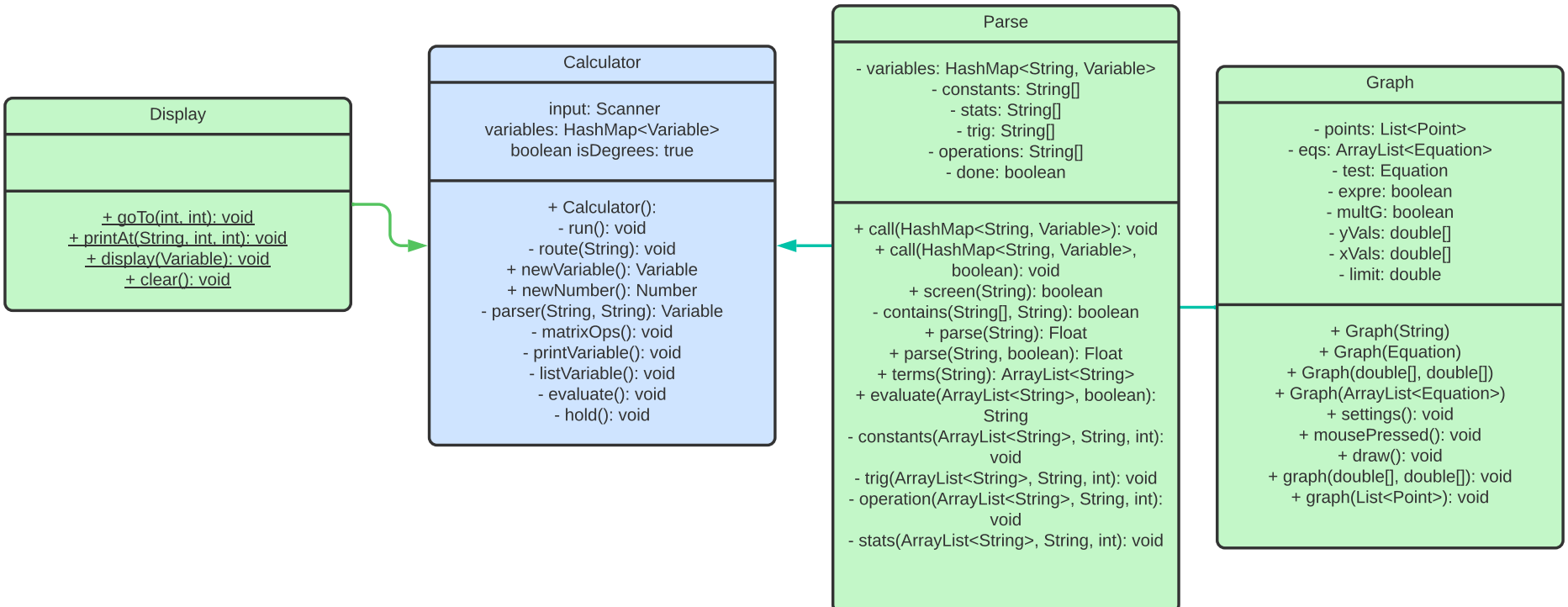

Calculator
input: Scanner
variables: HashMap<Variable>
boolean isDegrees: true
+ Calculator():
- run(): void
- route(String): void
+ newVariable(): Variable
+ newNumber(): Number
- parser(String, String): Variable
- matrixOps(): void
- printVariable(): void
- listVariable(): void
- evaluate(): void
- hold(): void
Display
+ goTo(int, int): void
+ printAt(String, int, int): void
+ display(Variable): void
+ clear(): void
Parse
- variables: HashMap<String, Variable>
- constants: String[]
- stats: String[]
- trig: String[]
- operations: String[]
- done: boolean
+ call(HashMap<String, Variable>): void
+ call(HashMap<String, Variable>, boolean): void
+ screen(String): boolean
- contains(String[], String): boolean
+ parse(String): Float
+ parse(String, boolean): Float
+ terms(String): ArrayList<String>
+ evaluate(ArrayList<String>, boolean): String
- constants(ArrayList<String>, String, int): void
- trig(ArrayList<String>, String, int): void
- operation(ArrayList<String>, String, int): void
- stats(ArrayList<String>, String, int): void
Graph
- points: List<Point>
- eqs: ArrayList<Equation>
- test: Equation
- expre: boolean
- multG: boolean
- yVals: double[]
- xVals: double[]
- limit: double
+ Graph(String)
+ Graph(Equation)
+ Graph(double[], double[])
+ Graph(ArrayList<Equation>)
+ settings(): void
+ mousePressed(): void
+ draw(): void
+ graph(double[], double[]): void
+ graph(List<Point>): void
Functions
+ pi: float
+tau: float
+ e: float
Statistics
+ abs(Number): Number
+ ceil(Float): Int
+ floor(Float): Int
+ exp(Number): Number
+ exp(Number, Int): Number
+ pow(Number, Number): Number
+ ln(Number): Number
+sqrt(Number): Float
+ log(Number, Number): Number
+ gcd(Int, Int): Int
+ lcm(Int, Int): Int
+ sqrt(Number): Float
Trig
+ sin(Angle): Number
+ cos(Angle): Number
+ tan(Angle): Number
+ sec(Angle): Number
+ csc(Angle): Number
+ cot(Angle): Number
+ arcsin(Float, boolean): Angle
+ arccos(Float, boolean): Angle
+ arctan(Float, boolean): Angle
- arctan(Float, boolean, boolean): Angle
+ arcsec(Float, boolean): Angle
+ arccsc(Float, boolean): Angle
+ arccot(Float, boolean): Angle
Matrices
+ emptyMatrix(int, int): Matrix
+ multiplication(Matrix, Matrix): Matrix
+ addition(Matrix, Matrix): Matrix
+ scale(double, Matrix): Matrix
+ det(Matrix): Fraction
+ cofactor(Matrix): Matrix
+ transpose(Matrix): Matrix
+ adjoint(Matrix): Matrix
+ inverse(Matrix): Matrix
Arithmetic
+ add(Numer, Number): Float
+ subtract(Number, Number): Float
+ multiply(Number, Number): Float
+divide(Number, Number): Float
Variable
+ name: String
+ Variable(String, String)
+ copy(): Variable
+ name(): String
<<interface>>
Number
+ get(): Number
+ getInt(): Int
+ getFloat(): Float
+ getFraction(): Fraction
+ value(): double
+ setValue(double): void
+ setValue(int): void
+ name(): String
Point
- xCor: Number
- yCor: Number
+ Point(Number, Number, String)
+ Point(double, double, String)
+ getX(): Number
+ getY(): Number
+ setX(Number): void
+ setY(Number): void
+ toString(): String
Matrix
- matrix: Fraction[][],
- int: cols
- int: row
+ Matrix(String)
+ Matrix(Scanner, int, int)
+ Matrix(int[][])
+ toString(): String
+ rows(): int
+ cols(): int
+ set(int, int, Fraction): void
+ get(int, int): Fraction
Angle
- degrees: boolean,
- value: double,
+ Angle(dobule, boolean, String)
+ degToRad(double): double
+ radToDeg(double): double
+ value(): double
+ isDegrees(): boolean
+ isRadians(): boolean
+ setDegrees(): double
+ setRadians(): double
+ setValue(Number): void
+ toString(): String
List<E>
- list: ArrayList<E>
+ List()
+ length(): Int
+ set(int, E): void
+ get(int): int
+ add(E): void
+ remove(int): E
Equation
- equation: String
- isDegrees: boolean
+ substitute(String, double): double
+ values(double, double, double, String): List<Point>
+ toString(): String
Float
- value: double
+ Float(double, String):
+ Float(int, String):
+ toString(): String
Int
- value: int
+ Int(double, String)
+ Int(int, String)
+ intValue(): int
Fraction
- numerator: int
- denominator: int
+ Fraction(Int, Int, String)
+ Fraction(int, int String)
+ Fraction(double, String)
+ Fraction(double, int, String)
+ getNumerator(): Int
+ getDenominator(): Int
+ setNumerator(Int): void
+ setDenominator(Int): void
+ simplify(): void
+ reciprocal(): void
+ approx(double, int): Fraction
+ evalContFrac(String): double
- evalContFrac(String[], int): double
+ contToFrac(String): Fraction
- contToFrac(String[], int, char): int
+ floatToCont(Float, int): String
- floatToContHelp(Float, int): String
+ toString(): String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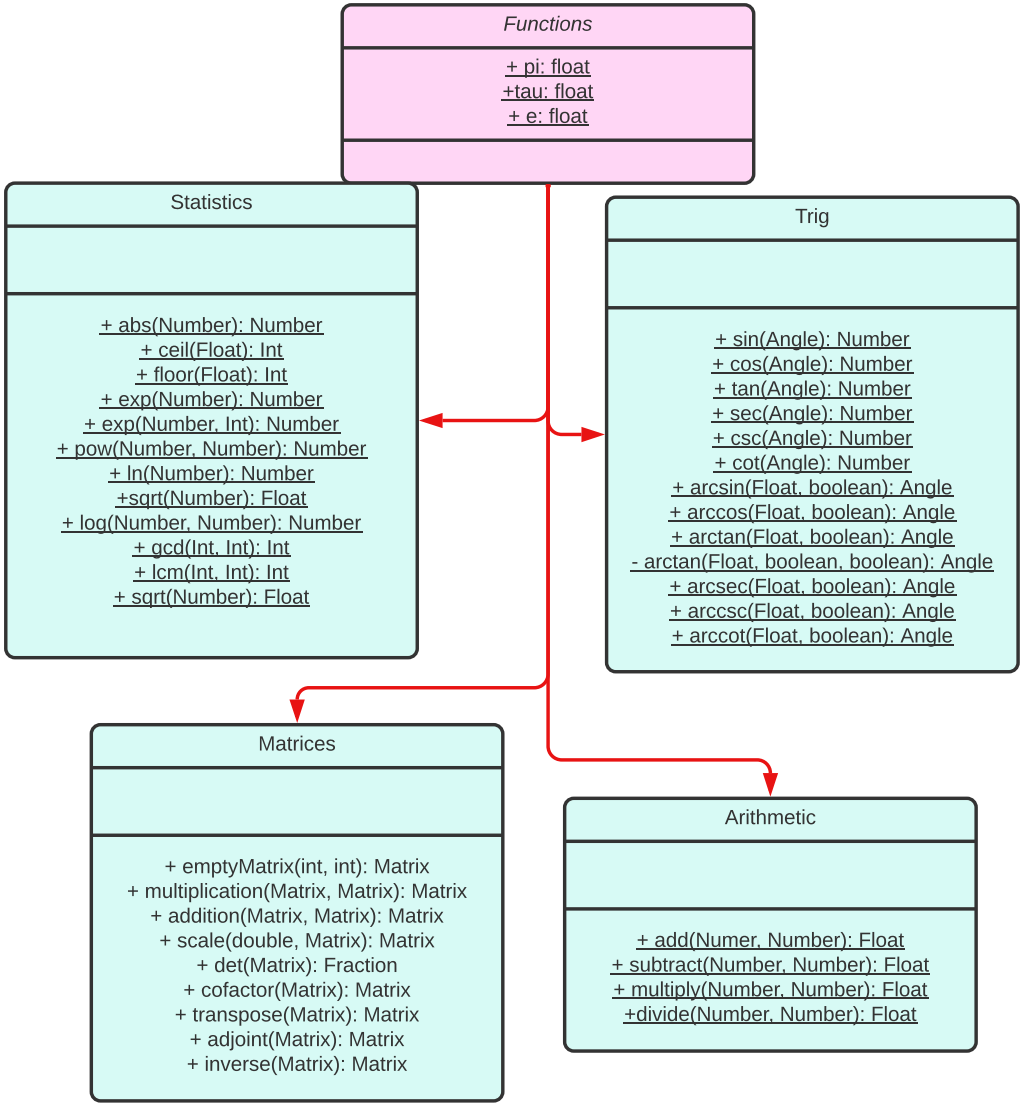
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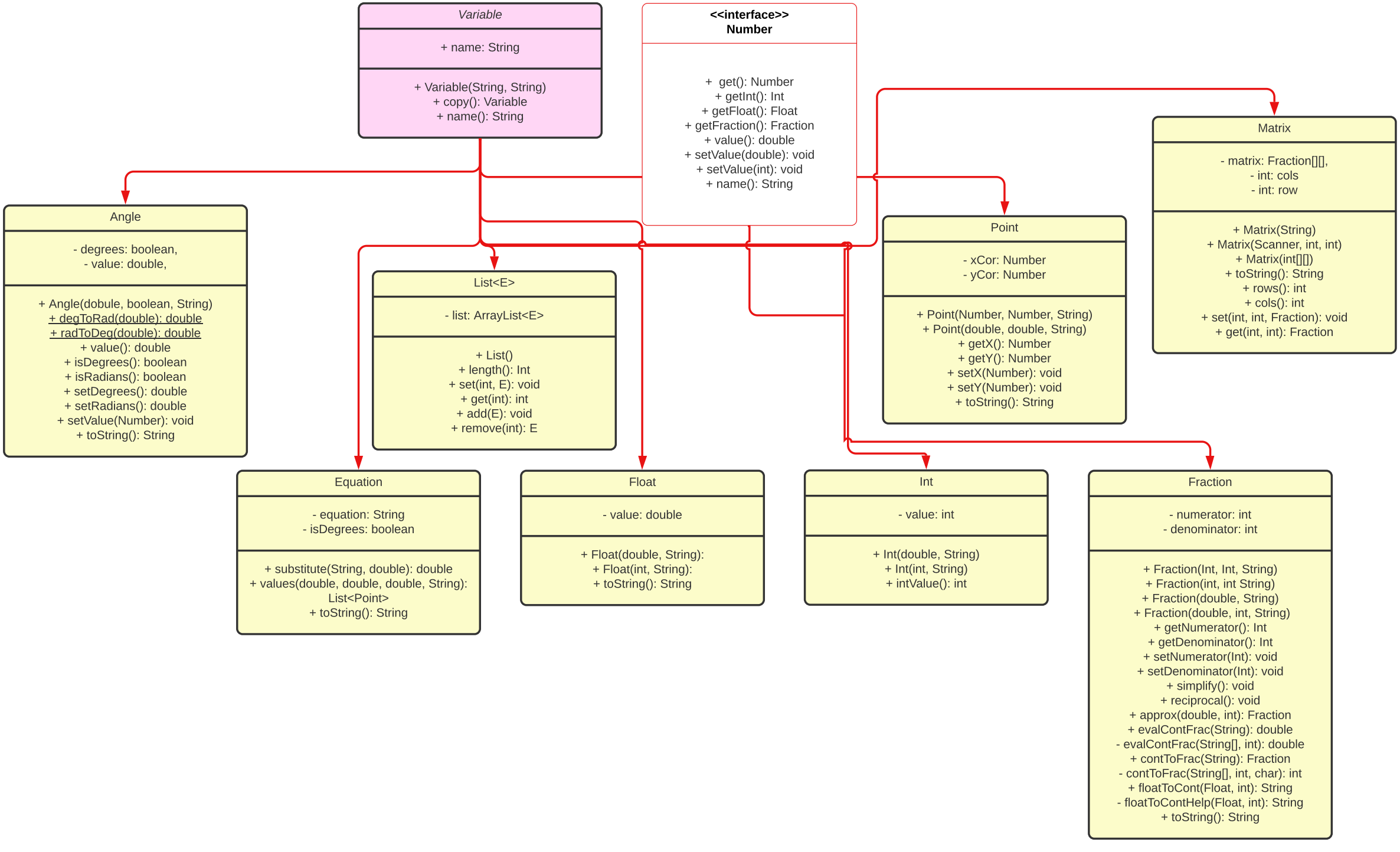
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+ Variable(String, String)
+ copy(): Variable
+ name(): String
<<interface>>
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+ getFloat(): Float
+ getFraction(): Fraction
+ value(): double
+ setValue(double): void
+ setValue(int): void
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- matrix: Fraction[][],
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- int: row
+ Matrix(String)
+ Matrix(Scanner, int, int)
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+ values(double, double, double, String): List<Point>
+ toString(): String
Float
- value: double
+ Float(double, String):
+ Float(int, String):
+ toString(): String
Int
- value: int
+ Int(double, String)
+ Int(int, String)
+ intValue(): int
Fraction
- numerator: int
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