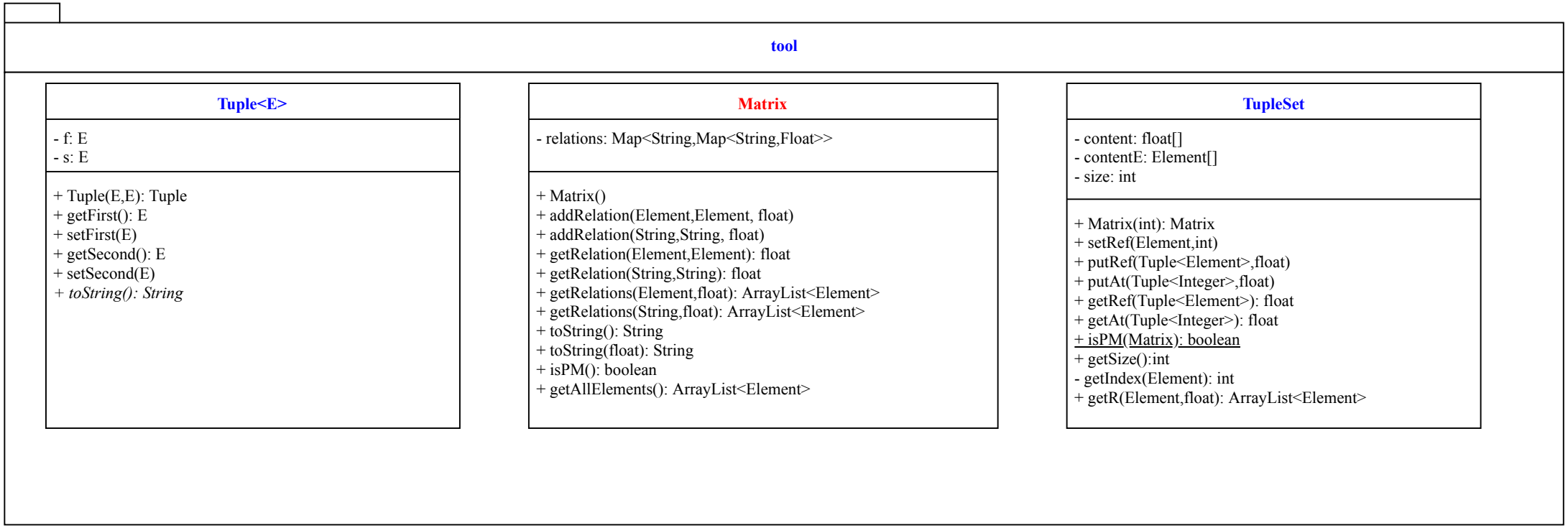
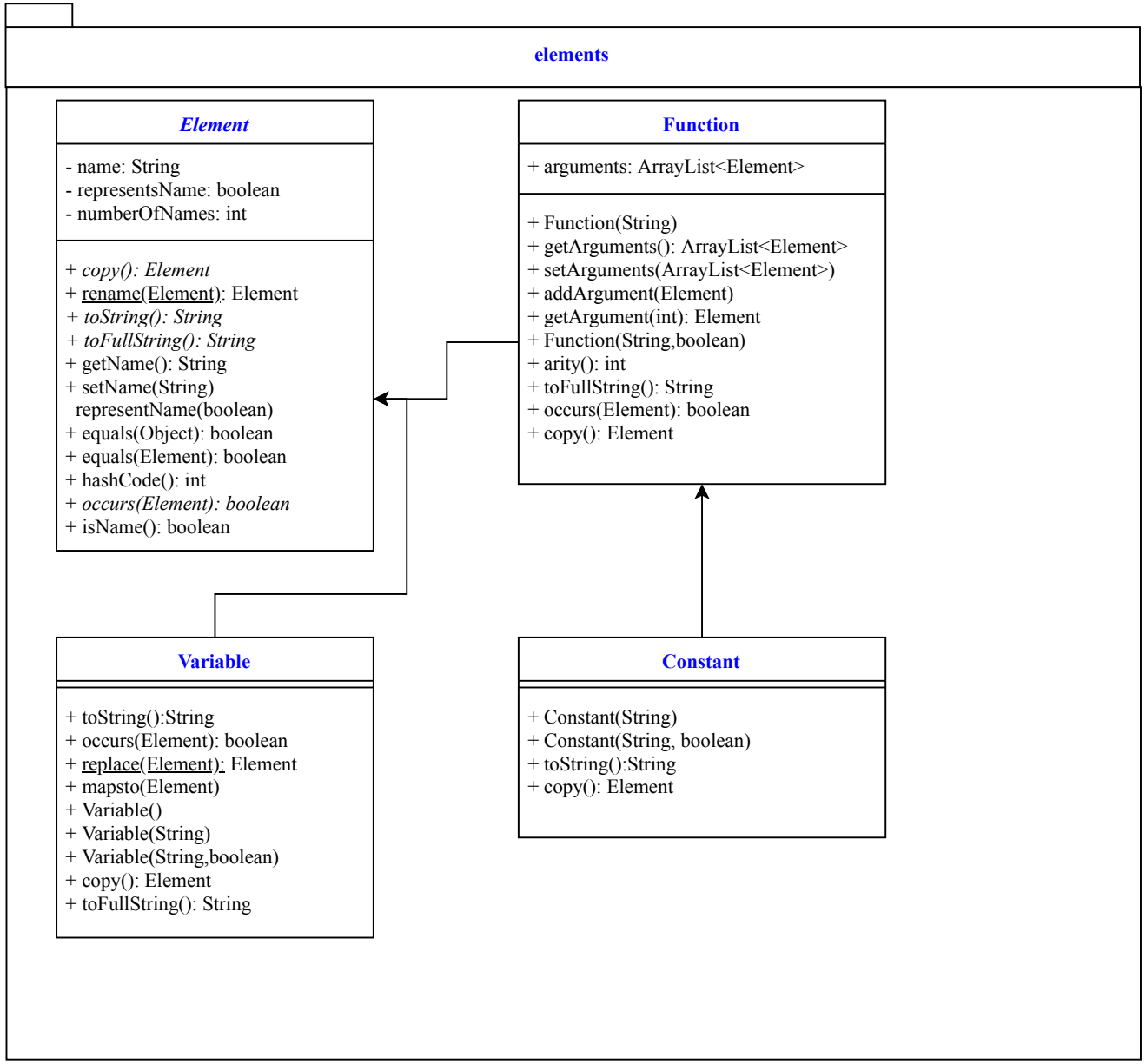
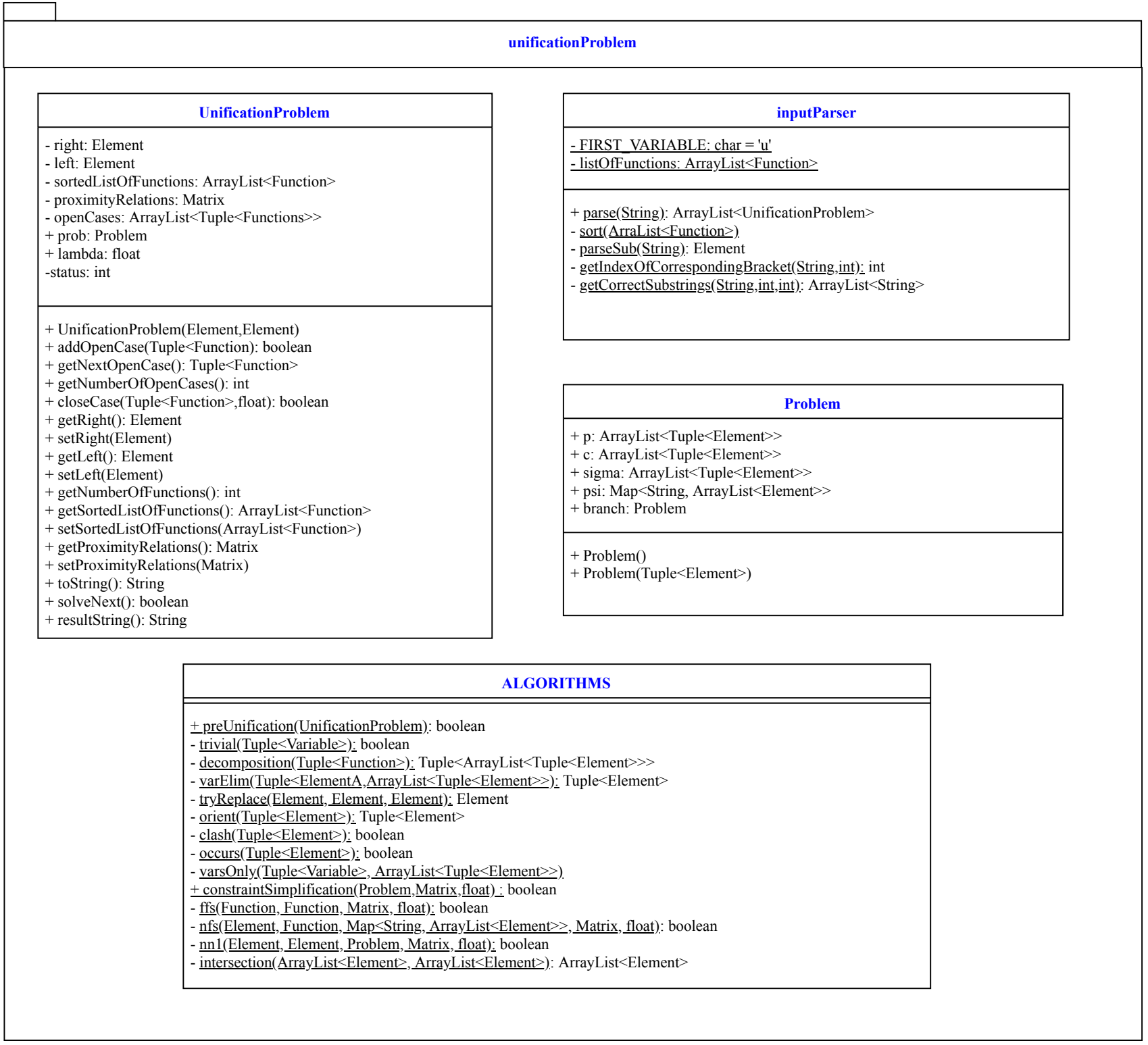

tool
Tuple<E>
- f: E
- s: E
+ Tuple(E,E): Tuple
+ getFirst(): E
+ setFirst(E)
+ getSecond(): E
+ setSecond(E)
+ toString(): String
Matrix
- relations: Map<String,Map<String,Float>>
+ Matrix()
+ addRelation(Element,Element, float)
+ addRelation(String,String, float)
+ getRelation(Element,Element): float
+ getRelation(String,String): float
+ getRelations(Element,float): ArrayList<Element>
+ getRelations(String,float): ArrayList<Element>
+ toString(): String
+ toString(float): String
+ isPM(): boolean
+ getAllElements(): ArrayList<Element>
TupleSet
- content: float[]
- contentE: Element[]
- size: int
+ Matrix(int): Matrix
+ setRef(Element,int)
+ putRef(Tuple<Element>,float)
+ putAt(Tuple<Integer>,float)
+ getRef(Tuple<Element>): float
+ getAt(Tuple<Integer>): float
+ isPM(Matrix): boolean
+ getSize():int
- getIndex(Element): int
+ getR(Element,float): ArrayList<Element>


elements
Element
- name: String
- representsName: boolean
- numberOfNames: int
+ copy(): Element
+ rename(Element): Element
+ toString(): String
+ toFullString(): String
+ getName(): String
+ setName(String)
representName(boolean)
+ equals(Object): boolean
+ equals(Element): boolean
+ hashCode(): int
+ occurs(Element): boolean
+ isName(): boolean
Function
+ arguments: ArrayList<Element>
+ Function(String)
+ getArguments(): ArrayList<Element>
+ setArguments(ArrayList<Element>)
+ addArgument(Element)
+ getArgument(int): Element
+ Function(String,boolean)
+ arity(): int
+ toFullString(): String
+ occurs(Element): boolean
+ copy(): Element
Variable
+ toString():String
+ occurs(Element): boolean
+ replace(Element): Element
+ mapsto(Element)
+ Variable()
+ Variable(String)
+ Variable(String,boolean)
+ copy(): Element
+ toFullString(): String
Constant
+ Constant(String)
+ Constant(String, boolean)
+ toString():String
+ copy(): Element


unificationProblem
UnificationProblem
- right: Element
- left: Element
- sortedListOfFunctions: ArrayList<Function>
- proximityRelations: Matrix
- openCases: ArrayList<Tuple<Functions>>
+ prob: Problem
+ lambda: float
-status: int
+ UnificationProblem(Element,Element)
+ addOpenCase(Tuple<Function): boolean
+ getNextOpenCase(): Tuple<Function>
+ getNumberOfOpenCases(): int
+ closeCase(Tuple<Function>,float): boolean
+ getRight(): Element
+ setRight(Element)
+ getLeft(): Element
+ setLeft(Element)
+ getNumberOfFunctions(): int
+ getSortedListOfFunctions(): ArrayList<Function>
+ setSortedListOfFunctions(ArrayList<Function>)
+ getProximityRelations(): Matrix
+ setProximityRelations(Matrix)
+ toString(): String
+ solveNext(): boolean
+ resultString(): String
inputParser
- FIRST_VARIABLE: char = 'u'
- listOfFunctions: ArrayList<Function>
+ parse(String): ArrayList<UnificationProblem>
- sort(ArraList<Function>)
- parseSub(String): Element
- getIndexOfCorrespondingBracket(String,int): int
- getCorrectSubstrings(String,int,int): ArrayList<String>
Problem
+ p: ArrayList<Tuple<Element>>
+ c: ArrayList<Tuple<Element>>
+ sigma: ArrayList<Tuple<Element>>
+ psi: Map<String, ArrayList<Element>>
+ branch: Problem
+ Problem()
+ Problem(Tuple<Element>)
ALGORITHMS
+ preUnification(UnificationProblem): boolean
- trivial(Tuple<Variable>): boolean
- decomposition(Tuple<Function>): Tuple<ArrayList<Tuple<Element>>>
- varElim(Tuple<ElementA,ArrayList<Tuple<Element>>): Tuple<Element>
- tryReplace(Element, Element, Element): Element
- orient(Tuple<Element>): Tuple<Element>
- clash(Tuple<Element>): boolean
- occurs(Tuple<Element>): boolean
- varsOnly(Tuple<Variable>, ArrayList<Tuple<Element>>)
+ constraintSimplification(Problem,Matrix,float) : boolean
- ffs(Function, Function, Matrix, float): boolean
- nfs(Element, Function, Map<String, ArrayList<Element>>, Matrix, float): boolean
- nn1(Element, Element, Problem, Matrix, float): boolean
- intersection(ArrayList<Element>, ArrayList<Element>): ArrayList<Element>