CodeGenerator

+GenerateCodeAndWriteToFile

```
Accept ( new CodeGeneratorVisitor())
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CodeGeneratorVisitor

- +outputCode : StringBuilder
- +indentationLevel : int
- +filesNstuff : Filehandling
- +resultVarStack : Stack<Variable>
- +astack : Stack<Variable>
 +bstack : Stack<Variable>
- +unique : int
- +String visit(BaseASTNode node);

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- +Void visit(ConstantExpressionNode node);
- +String inden(String txt);
- +String functionWithArgs(Variable func);
- +String commaSepExprList(ArrayList<ExpressionNode> items);
- +String statementBody(ArrayList<BaseASTNode> statements);
- +String printFunction(Variable func);
- +String matrixKernel(String kernelName, String aID, String bID, String resID, String simpleType);
- +String makeMatrix(String rows, String cols);
- +String makeVector(String rows);
- +String complexEntrance(Variable variable);
- +String applyBoundsCheck(Variable variable, String code);
- +String applySameSizeCheck(Variable matrixA, Variable matrixB, String code);
- +String makeFillArray(Strind id, String, simpletype, String size, String expression);
- +String makeFullLoop(String id, String simpleType);