```
Variable
                                                                                 InputArg
                                                                                 OutputArg
                                                                                 Coder
                                                                                 fingerPrint
                           snippetCoder
                                                                                 tf_explicit = false
srcHeader = {}
                                                                                 sourceCode = {}
srcMain = {}
                                                                                 language = 'c++'
srcBeforeCode = {}
                                                                                 Generator
srcCode = {}
srcAfterCode = {}
                                                                                 mexPath
srcEnd = {}
                                                                                 this = snippet(src, opt)
lineNumber
                                                                                 explicit(this, tf)
                                                                                 list(this)
this = snippetCoder(cppHeader, cppEnd)
                                                                                 io(this)
reset(this)
                                                                                 edit(this)
buffer = header(this, src, alias)
                                                                                 compileMex(this)
buffer = beforeCode(this, src, alias)
                                                                                 reset(this)
buffer = code(this, src, alias)
                                                                                 deleteBinary(this)
buffer = afterCode(this, src, alias)
                                                                                 run(this, flag)
list(this, fileName)
                                                                                 tf = isCompiled(this)
listSection(this, section, fid, tf_displayLineNumbers)
                                                                                 precompile(this)
buffer = preprocessing(src, alias)
                                                                                 compile(this, funName)
                                                                                 generateGateway(this)
                                                                                 [gateway, mexfile, ext] = getFileName(this)
                                                                                 tf = handlePragma(this, src, tf_precompilation)
                                                                                 Arg = addInputArgument(this, v)
                                                                                 Arg = addOutputArgument(this, v)
                                                                                 Arg = addIOArgumentHelper(this, v)
                                   snippetGenerator
                                                                                 [var, pos] = getVariable(this, name)
                   Cdr = coder()
                                                                                 wd = getWorkingDirectory()
                   declareAsInput(Arg, Cdr)
                                                                                 fp = generateFingerPrint(src)
                   declareAsOutput(Arg, Cdr)
                                                                                 ver = getVersion()
                                                                                 info()
                                                                                 clear()
                                                                                 declaredArguments = parseArgumentDeclaration(declr)
                                                                                 msg = parsingErrorMsg(str, k)
                                 snippetCppGenerator
                                                                                 [tf, varargout] = checkVariableType(vartype, lang)
                                                                                 [tf, arrayType, cppType] = checkVariableTypeCpp(vartype)
                   Cdr = coder()
                                                                                 [tf, classId, cType, mexType] = checkVariableTypeC(vartype)
                   declareAsInput(Arg, Cdr)
                                                                                 [tf, classId, fType] = checkVariableTypeFortran(vartype)
                   declareAsOutput(Arg, Cdr)
                                                                                 tf = isVariableName(str)
                   declareAsMatrixInput(Arg, Cdr)
                                                                                 [user, userDir] = getuserdir()
                   declareAsScalarInput(Arg, Cdr)
                   declareAsMatrixOutput(Arg, Cdr)
                                  snippetCGenerator
                   Cdr = coder()
                   declareAsInput(Arg, Cdr)
                   declareAsOutput(Arg, Cdr)
                   declareAsMatrixInput(Arg, Cdr)
                   declareAsScalarInput(Arg, Cdr)
                   declareAsMatrixOutput(Arg, Cdr)
                               snippetFortranGenerator
                                                                      Not yet
                                                                      implemented
                    Cdr = coder()
```

declareAsInput(Arg, Cdr)
declareAsOutput(Arg, Cdr)

snippet

```
snippetVariable
name
type
this = snippetVariable(name, type)
[var, pos] = findByName(this, name)
[this, pos] = insert(this, v)
code = declare(this, Cdr)
tf = isEqual(this, other)
                         IOArgument
name
type
dims = {}
mode = MODE_MOVE
position
link
MODE_CONST = 1
MODE\_MOVE = 2
MODE_COPY = 3
MODE_NEW = 1
MODE_INPUT = 2
this = IOArgument(name, type, position, dims, mode)
tf = isScalar(this)
setLink(this, linkedInputArg)
```