pointer:0x7f983ca72010 SgSourceFile

root node

```
SgNode* p_parent: 0x9afa00
bool p isModified: 0
bool p_containsTransformation: 0
Sq File Info* p startOfConstruct : 0x7f983cc31068
SgStringList p_originalCommandLineArgumentList : [pdfGenerator, -c, accumulationStmt.c]
int p_verbose: 0
bool p_output_warnings: 0
bool p_C_only: 1
bool p_UPC_only: 0
bool p_UPCxx_only: 0
int p_upc_threads: 0
bool p C89 only: 0
bool p_C89_gnu_only: 0
bool p_C99_only: 1
bool p_C99_gnu_only: 1
bool p_Cxx_only: 0
bool p_C11_only: 0
bool p_C11_gnu_only: 0
bool p_Cxx0x_only: 0
bool p_Cxx11_only: 0
bool p_Cxx11_gnu_only: 0
bool p_C14_only: 0
bool p_C14_gnu_only: 0
bool p_Cxx14_only: 0
bool p_Cxx14_gnu_only: 0
bool p_Fortran_only: 0
bool p_F77_only: 0
bool p_F90_only: 0
bool p_F95_only: 0
bool p_F2003_only: 0
bool p_F2008_only: 0
bool p_CoArrayFortran_only: 0
bool p_Java_only: 0
bool p_X10_only: 0
bool p_PHP_only: 0
bool p_Python_only: 0
bool p_Cuda_only: 0
bool p_OpenCL_only: 0
bool p_requires_C_preprocessor: 0
bool p_binary_only: 0
SgFile::outputFormatOption enum p inputFormat: 2
SgFile::outputFormatOption_enum p_outputFormat : 2
SgFile::outputFormatOption_enum p_backendCompileFormat : 2
bool p_fortran_implicit_none: 0
bool p_openmp: 0
bool p openmp parse only: 1
bool p_openmp_ast_only: 0
bool p_openmp_lowering: 0
bool p_cray_pointer_support: 0
bool p_failsafe: 0
bool p output parser actions: 0
bool p_exit_after_parser : 0
bool p_skip_syntax_check: 0
bool p_relax_syntax_check : 0
bool p_skip_translation_from_edg_ast_to_rose_ast : 0
bool p_skip_transformation: 0
bool p_skip_unparse: 0
bool p_skipfinalCompileStep: 0
bool p_unparse_includes: 0
bool p_unparse_line_directives: 0
bool p_unparse_function_calls_using_operator_syntax: 0
```

pointer:0x7f983cbac120 SgGlobal /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f983ca72010

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983cc310c0
Sg_File_Info* p_endOfConstruct : 0x7f983cc31118
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f983cb61140
SgTypeTable* p_type_table: 0x9ea448
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgDeclarationStatementPtrList p_declarations: <too long>: <too long>: [0x7f983c8c7010, 0x7f983c3c1010, 0x7f983c3c13e0, 0x7f983c3c
```

```
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L1R__L2R
  Click here to go to the parent node
SgNode* p_parent: 0x7f983cbac120
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983b8bfcd0
Sg_File_Info* p_endOfConstruct : 0x7f983b8bfd28
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes: 0
std::string p_linkage:
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly: 0
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p_definingDeclaration: 0x7f983bb9bd90
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f983bb9b9c0
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name: foo
SgFunctionParameterList* p_parameterList: 0x7f983bd1f990
SgFunctionModifier p_functionModifier : <too long>: <too long>: SgFunctionModifier(isUnknown() = false isDefault() = true isInline()
SgSpecialFunctionModifier p_specialFunctionModifier: <too long>: <too long>: SgSpecialFunctionModifier(isUnknown() = false isDefault()
SgTypePtrList p_exceptionSpecification : []
bool p_named_in_end_statement: 0
std::string p_asm_name :
SgExprListExp* p_decoratorList : 0
SgFunctionType* p_type: 0x7f983c5b0c70
SgFunctionDefinition* p_definition: 0x7f983b747010
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f983cbac120
SgDeclarationStatement::template_specialization_enum p_specialization: 1
bool p_requiresNameQualificationOnReturnType: 0
std::string p_gnu_extension_section:
std::string p gnu extension alias:
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability: 1
int p_name_qualification_length : 0
bool p_type_elaboration_required: 0
bool p_global_qualification_required: 0
int p name qualification length for return type: 0
bool p_type_elaboration_required_for_return_type: 0
bool p_global_qualification_required_for_return_type: 0
bool p_prototypeIsWithoutParameters: 0
int p_gnu_regparm_attribute: -1
SgFunctionType* p type syntax: 0
bool p_type_syntax_is_available: 0
bool p_using_C11_Noreturn_keyword: 0
bool p_is_constexpr: 0
bool p_using_new_function_return_type_syntax: 0
SgFunctionParameterScope* p_functionParameterScope: 0
bool p_marked_as_edg_normalization: 0
```

pointer:0x7f983bb9bd90 SgFunctionDeclaration

/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:1

pointer:0x7f983bd1f990 SgFunctionParameterList /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:1 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L2R

SgInitializedNamePtrList p_args: [0x7f983b90a1b0, 0x7f983b90a2f8, 0x7f983b90a440]

```
SgNode* p_parent : 0x7f983bb9bd90
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0460
Sg_File_Info* p_endOfConstruct : 0x7f983b8c04b8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
unsigned int p_decl_attributes: 0
std::string p_linkage:
SgDeclarationModifier p_declarationModifier: <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFrien
bool p_nameOnly: 0
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p_definingDeclaration: 0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f983bd1f990
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
```

```
pointer:0x7f983b90a1b0
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:18
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7f983bd1f990
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f983b8c00f0
Sg_File_Info* p_endOfConstruct : 0x7f983b8c0148
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: xa1
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f983c6b5538
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f983bb9bd90
SgStorageModifier* p_storageModifier : 0x143d430
SgScopeStatement* p_scope : 0x7f983b747010
SgInitializedName::preinitialization_enum p_preinitialization: 0
bool p isCoArray: 0
SqInitializedName::asm register name enum p register name code: 0
SgInitializedName::excess specifier enum p excess specifier: 0
std::string p register name string:
bool p_requiresGlobalNameQualificationOnType: 0
bool p_shapeDeferred: 0
bool p_initializationDeferred: 0
unsigned long int p_gnu_attribute_initialization_priority: 0
std::string p_gnu_attribute_named_weak_reference :
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment : -1
SqDeclarationModifier::gnu declaration visability enum p gnu attribute visability: 0
bool p_protected_declaration: 0
int p_name_qualification_length_for_type: 0
bool p_type_elaboration_required_for_type: 0
bool p_global_qualification_required_for_type: 0
bool p_hasArrayTypeWithEmptyBracketSyntax: 0
bool p_using_C11_Alignas_keyword: 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword: 0
bool p using auto keyword: 0
bool p_using_device_keyword: 0
bool p is braced initialized: 0
```

```
pointer:0x7f983b90a2f8
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:30
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7f983bd1f990
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f983b8c01a0
Sg_File_Info* p_endOfConstruct : 0x7f983b8c01f8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: ax
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f983c353010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f983bb9bd90
SgStorageModifier* p_storageModifier : 0x143d458
SgScopeStatement* p_scope : 0x7f983b747010
SgInitializedName::preinitialization_enum p_preinitialization: 0
bool p isCoArray: 0
SqInitializedName::asm register name enum p register name code: 0
SgInitializedName::excess specifier enum p excess specifier: 0
std::string p register name string:
bool p_requiresGlobalNameQualificationOnType: 0
bool p_shapeDeferred: 0
bool p initializationDeferred: 0
unsigned long int p_gnu_attribute_initialization_priority: 0
std::string p_gnu_attribute_named_weak_reference :
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment : -1
SqDeclarationModifier::gnu declaration visability enum p gnu attribute visability: 0
bool p_protected_declaration: 0
int p_name_qualification_length_for_type: 0
bool p_type_elaboration_required_for_type: 0
bool p_global_qualification_required_for_type: 0
bool p_hasArrayTypeWithEmptyBracketSyntax: 0
bool p_using_C11_Alignas_keyword: 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword: 0
bool p using auto keyword: 0
bool p_using_device_keyword: 0
bool p is braced initialized: 0
```

```
pointer:0x7f983b90a440
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:38
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7f983bd1f990
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f983b8c0250
Sg_File_Info* p_endOfConstruct : 0x7f983b8c02a8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: len
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f983c1c7010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f983bb9bd90
SgStorageModifier* p_storageModifier : 0x143d480
SgScopeStatement* p_scope : 0x7f983b747010
SgInitializedName::preinitialization_enum p_preinitialization: 0
bool p isCoArray: 0
SqInitializedName::asm register name enum p register name code: 0
SgInitializedName::excess specifier enum p excess specifier: 0
std::string p register name string:
bool p_requiresGlobalNameQualificationOnType: 0
bool p_shapeDeferred: 0
bool p initializationDeferred: 0
unsigned long int p_gnu_attribute_initialization_priority: 0
std::string p_gnu_attribute_named_weak_reference :
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment : -1
SqDeclarationModifier::gnu declaration visability enum p gnu attribute visability: 0
bool p_protected_declaration: 0
int p_name_qualification_length_for_type: 0
bool p_type_elaboration_required_for_type: 0
bool p_global_qualification_required_for_type: 0
bool p_hasArrayTypeWithEmptyBracketSyntax: 0
bool p_using_C11_Alignas_keyword: 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword: 0
bool p using auto keyword: 0
bool p_using_device_keyword: 0
bool p is braced initialized: 0
```

pointer:0x7f983b747010
SgFunctionDefinition
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 3:1
IsTransformation:0
IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f983bb9bd90
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0300
Sg_File_Info* p_endOfConstruct : 0x7f983b8c0358
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f983cb614d0
SgTypeTable* p_type_table : 0x9ea4c0
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7f983b7dc010
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7f983b7dc010 SgBasicBlock /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 3:1 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f983b747010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0040
Sg_File_Info* p_endOfConstruct : 0x7f983b8c0098
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f983cb613a0
SgTypeTable* p_type_table: 0x9ea498
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f983b6b6010]
std::string p_asm_function_body :
```

pointer:0x7f983b6b6010 SgForStatement /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:3 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f983b7dc010
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f983b8c17f8
Sg_File_Info* p_endOfConstruct : 0x7f983b8c1850
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f983cb61600
SgTypeTable* p_type_table: 0x9ea4e8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgForInitStatement* p_for_init_stmt : 0x7f983b67f080
SgStatement* p_test: 0x7f983b321010
SgExpression* p_increment : 0x7f983b2ee010
SgStatement* p loop body: 0x7f983b7dc128
SgStatement* p_else_body: 0
std::string p_string_label:
```

pointer:0x7f983b67f080 SgForInitStatement /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:8 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f983b6b6010

bool p_isModified : 0

bool p_containsTransformation: 0

Sg_File_Info* p_startOfConstruct : 0x7f983b8c0930 Sg_File_Info* p_endOfConstruct : 0x7f983b8c0988

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgStatementPtrList p_init_stmt : [0x7f983b53e010]

```
Click here to go to the parent node
SqNode* p parent : 0x7f983b67f080
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0670
Sg_File_Info* p_endOfConstruct : 0x7f983b8c06c8
AttachedPreprocessingInfoType* p attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value : -1
unsigned int p decl attributes: 0
std::string p_linkage:
SqDeclarationModifier p_declarationModifier : <too long>: <too long>: SqDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly: 1
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p definingDeclaration: 0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f983b53e010
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables: [0x7f983b90a588]
bool p_variableDeclarationContainsBaseTypeDefiningDeclaration: 0
SgDeclarationStatement::template_specialization_enum p_specialization: 1
bool p_requiresGlobalNameQualificationOnType: 0
std::string p_gnu_extension_section:
std::string p_gnu_extension_alias :
unsigned short p gnu extension initialization priority: 0
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability: 0
SgVariableDeclaration::gnu_extension_declaration_attributes_enum p_gnu_extension_declaration_attribute: 0
int p name qualification length: 0
bool p_type_elaboration_required: 0
bool p_global_qualification_required: 0
bool p_isAssociatedWithDeclarationList: 0
bool p_isFirstDeclarationOfDeclarationList: 1
bool p is thread local: 0
bool p_is_constexpr: 0
```

SgSS2

scope

pointer:0x7f983b53e010 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:8

Declaration mangled name: _variable_declaration__variable_type_i_variable_name_L1R__L2R__scope_

```
pointer:0x7f983b90a588
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:8
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent : 0x7f983b53e010
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f983b8c0618
Sg_File_Info* p_endOfConstruct : 0x7f983b8c05c0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: i
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f983c1c7010
SgInitializer* p initptr: 0x7f983b3ba010
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f983b420010
SgStorageModifier* p_storageModifier : 0x143d4a8
SgScopeStatement* p_scope : 0x7f983b6b6010
SgInitializedName::preinitialization_enum p_preinitialization: 0
bool p isCoArray: 0
SqInitializedName::asm register name enum p register name code: 0
SgInitializedName::excess specifier enum p excess specifier: 0
std::string p register name string:
bool p_requiresGlobalNameQualificationOnType: 0
bool p_shapeDeferred: 0
bool p initializationDeferred: 0
unsigned long int p_gnu_attribute_initialization_priority: 0
std::string p_gnu_attribute_named_weak_reference :
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment : -1
SqDeclarationModifier::gnu declaration visability enum p gnu attribute visability: 2
bool p_protected_declaration: 0
int p_name_qualification_length_for_type: 0
bool p_type_elaboration_required_for_type: 0
bool p_global_qualification_required_for_type: 0
bool p_hasArrayTypeWithEmptyBracketSyntax: 0
bool p_using_C11_Alignas_keyword: 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword: 0
bool p using auto keyword: 0
bool p_using_device_keyword: 0
bool p is braced initialized: 0
```

pointer:0x7f983b3ba010 SgAssignInitializer compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

SgType* p_expression_type: 0

```
SgNode* p_parent : 0x7f983b90a588
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0880
Sg_File_Info* p_endOfConstruct : 0x7f983b8c0828
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f983b8c0568
bool p_is_explicit_cast: 1
bool p_is_braced_initialized: 0
SgExpression* p_operand_i : 0x7f983b3ed010
```

pointer:0x7f983b3ed010 SgIntVal /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:14 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

SgNode* p_parent: 0x7f983b3ba010

```
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f983b8c0778
Sg_File_Info* p_endOfConstruct: 0x7f983b8c07d0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f983b8c0510
SgExpression* p_originalExpressionTree: 0
int p_value: 0
std::string p_valueString: 0
```

pointer:0x7f983b321010 SgExprStatement /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:17 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f983b6b6010

bool p_isModified : 0

bool p_containsTransformation: 0

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgExpression* p_expression: 0x7f983b350010

pointer:0x7f983b350010
SgLessThanOp
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:18
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

SgExpression* p_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f983b321010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0c48
Sg_File_Info* p_endOfConstruct : 0x7f983b8c0ca0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f983b8c09e0
SgExpression* p_lhs_operand_i : 0x7f983b387010
SgExpression* p_rhs_operand_i: 0x7f983b387078
SgType* p_expression_type : 0
```

pointer:0x7f983b387010 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:17 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f983b350010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f983b8c0a38 Sg_File_Info* p_endOfConstruct : 0x7f983b8c0a90 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f983b8c08d8 SgVariableSymbol* p_symbol : 0x14a27e0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f983b387078
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:19
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

SgNode* p_parent : 0x7f983b350010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f983b8c0b40 Sg_File_Info* p_endOfConstruct : 0x7f983b8c0b98 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f983b8c0720 SgVariableSymbol* p_symbol : 0x14a27b0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0 bool p_global_qualification_required: 0

pointer:0x7f983b2ee010 SgPlusPlusOp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:25 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

```
SgNode* p_parent : 0x7f983b6b6010
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0f08
Sg_File_Info* p_endOfConstruct : 0x7f983b8c0f60
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f983b8c0ae8
SgExpression* p_operand_i : 0x7f983b3870e0
SgType* p_expression_type: 0
SgUnaryOp::Sgop_mode p_mode : 1
```

pointer:0x7f983b3870e0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:24 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

```
SgNode* p_parent : 0x7f983b2ee010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0e00
Sg_File_Info* p_endOfConstruct : 0x7f983b8c0e58
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 1
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition : 0x7f983b8c0bf0
SgVariableSymbol* p_symbol : 0x14a27e0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length: 0
bool p_type_elaboration_required: 0
```

pointer:0x7f983b7dc128
SgBasicBlock
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 5:3
IsTransformation:0
IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f983b6b6010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f983b8c0fb8
Sg_File_Info* p_endOfConstruct : 0x7f983b8c1010
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f983cb61730
SgTypeTable* p_type_table : 0x9ea510
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements: [0x7f983b321070, 0x7f983b3210d0]
std::string p_asm_function_body :
```

pointer:0x7f983b321070 SgExprStatement /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 6:5 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f983b7dc128

bool p_isModified : 0

bool p_containsTransformation: 0

Sg_File_Info* p_startOlConstruct : 0x7f983b8c1590 Sg_File_Info* p_endOfConstruct : 0x7f983b8c15e8

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgExpression* p_expression: 0x7f983b280010

pointer:0x7f983b280010 SgPlusAssignOp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 6:11 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

Click here to go to the parent node

SgNode* p_parent : 0x7f983b321070

bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f983b8c14e0 Sg_File_Info* p_endOfConstruct : 0x7f983b8c1538 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f983b8c1278 SgExpression* p_lhs_operand_i : 0x7f983b2b7010 SgExpression* p_rhs_operand_i: 0x7f983b387218 SgType* p_expression_type : 0 SgExpression* p_originalExpressionTree : 0

pointer:0x7f983b2b7010 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 6:8 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

Click here to go to the parent node

SgExpression* p_originalExpressionTree : 0

SgNode* p_parent : 0x7f983b280010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f983b8c12d0 Sg_File_Info* p_endOfConstruct : 0x7f983b8c1328 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 1 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f983b8c1068 SgExpression* p_lhs_operand_i : 0x7f983b387148 SgExpression* p_rhs_operand_i : 0x7f983b3871b0 SgType* p_expression_type : 0

pointer:0x7f983b387148 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 6:5 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double *

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f983b2b7010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f983b8c10c0 Sg_File_Info* p_endOfConstruct : 0x7f983b8c1118 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f983b8c0eb0 SgVariableSymbol* p_symbol : 0x14a2750 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f983b3871b0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 6:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f983b2b7010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f983b8c11c8 Sg_File_Info* p_endOfConstruct : 0x7f983b8c1220 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f983b8c0da8 SgVariableSymbol* p_symbol : 0x14a27e0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f983b387218 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 6:13 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

Click here to go to the parent node

SgNode* p_parent : 0x7f983b280010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f983b8c13d8 Sg_File_Info* p_endOfConstruct : 0x7f983b8c1430 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f983b8c1170 SgVariableSymbol* p_symbol: 0x14a2780 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0 bool p_global_qualification_required: 0

pointer:0x7f983b3210d0 SgExprStatement /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 7:5 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent: 0x7f983b7dc128

bool p_isModified : 0

bool p_containsTransformation: 0

Sg_File_Info* p_startOfConstruct : 0x7f983b8c1748 Sg_File_Info* p_endOfConstruct : 0x7f983b8c17a0

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgExpression* p_expression: 0x7f983b258010

pointer:0x7f983b258010 SgNullExpression compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent: 0x7f983b3210d0
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xfffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f983b8c1698
Sg_File_Info* p_endOfConstruct: 0x7f983b8c16f0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
```

Sg_File_Info* p_operatorPosition: 0x7f983b8c1488