# pointer:0x7fb2536d2010 SgSourceFile

#### root node

```
SgNode* p_parent: 0x1b68a00
bool p isModified: 0
bool p_containsTransformation: 0
Sq File Info* p startOfConstruct: 0x7fb253891068
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:0x7fb25380c120 SgGlobal /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7fb2536d2010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb2538910c0
Sg_File_Info* p_endOfConstruct : 0x7fb253891118
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: 0x7fb2537c1140
SgTypeTable* p_type_table: 0x1ba3448
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>: [0x7fb253527010, 0x7fb253021010, 0x7fb2530213e0, 0x7fb25302
```

```
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L1R__L2R
   Click here to go to the parent node
SgNode* p_parent: 0x7fb25380c120
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb25251fcd0
Sg_File_Info* p_endOfConstruct : 0x7fb25251fd28
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: 0x7fb2527fbd90
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fb2527fb9c0
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name: foo
SgFunctionParameterList* p_parameterList: 0x7fb25297f990
SgFunctionModifier p_functionModifier : <too long>: <too long>: SgFunctionModifier(isUnknown() = false isDefault() = true isInline()
SgSpecialFunctionModifier p_specialFunctionModifier: <too long>: <too long>: SgSpecialFunctionModifier(isUnknown() = false isDefault()
SqTypePtrList p exceptionSpecification: []
bool p_named_in_end_statement: 0
std::string p_asm_name :
SgExprListExp* p_decoratorList : 0
SgFunctionType* p_type: 0x7fb253210c70
SgFunctionDefinition* p_definition: 0x7fb2523a7010
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7fb25380c120
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:0x7fb2527fbd90 SgFunctionDeclaration

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

pointer:0x7fb25297f990 SgFunctionParameterList /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:1 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L2R

SgInitializedNamePtrList p\_args: [0x7fb25256a1b0, 0x7fb25256a2f8, 0x7fb25256a440]

```
SgNode* p_parent : 0x7fb2527fbd90
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb252520460
Sg_File_Info* p_endOfConstruct : 0x7fb2525204b8
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: 0x7fb25297f990
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
```

```
pointer:0x7fb25256a1b0
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:18
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7fb25297f990
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fb2525200f0
Sg_File_Info* p_endOfConstruct : 0x7fb252520148
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 : 0x7fb253315538
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7fb2527fbd90
SgStorageModifier* p_storageModifier: 0x25f6430
SgScopeStatement* p_scope : 0x7fb2523a7010
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:0x7fb25256a2f8
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:30
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7fb25297f990
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fb2525201a0
Sg_File_Info* p_endOfConstruct : 0x7fb2525201f8
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 : 0x7fb252fb3010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7fb2527fbd90
SgStorageModifier* p_storageModifier: 0x25f6458
SgScopeStatement* p_scope : 0x7fb2523a7010
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:0x7fb25256a440
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 2:38
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7fb25297f990
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fb252520250
Sg_File_Info* p_endOfConstruct : 0x7fb2525202a8
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 : 0x7fb252e27010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7fb2527fbd90
SgStorageModifier* p_storageModifier: 0x25f6480
SgScopeStatement* p_scope : 0x7fb2523a7010
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:0x7fb2523a7010
SgFunctionDefinition
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 3:1
IsTransformation:0
IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7fb2527fbd90
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb252520300
Sg_File_Info* p_endOfConstruct : 0x7fb252520358
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: 0x7fb2537c14d0
SgTypeTable* p_type_table : 0x1ba34c0
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7fb25243c010
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7fb25243c010
SgBasicBlock
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 3:1
IsTransformation:0
IsOutputInCodeGeneration:0

```
SgNode* p_parent: 0x7fb2523a7010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb252520040
Sg_File_Info* p_endOfConstruct : 0x7fb252520098
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: 0x7fb2537c13a0
SgTypeTable* p_type_table: 0x1ba3498
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7fb252316010]
std::string p_asm_function_body :
```

pointer:0x7fb252316010 SgForStatement /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:3 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7fb25243c010
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fb2525217f8
Sg_File_Info* p_endOfConstruct : 0x7fb252521850
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: 0x7fb2537c1600
SgTypeTable* p_type_table: 0x1ba34e8
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 : 0x7fb2522df080
SgStatement* p_test: 0x7fb251f81010
SgExpression* p_increment : 0x7fb251f4e010
SgStatement* p loop body: 0x7fb25243c128
SgStatement* p_else_body: 0
std::string p_string_label:
```

pointer:0x7fb2522df080 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 : 0x7fb252316010

bool p\_isModified : 0

bool p\_containsTransformation: 0

Sg\_File\_Info\* p\_startOfConstruct : 0x7fb252520930 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252520988

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 : [0x7fb25219e010]

```
Click here to go to the parent node
SqNode* p parent: 0x7fb2522df080
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb252520670
Sg_File_Info* p_endOfConstruct : 0x7fb2525206c8
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: 0x7fb25219e010
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables: [0x7fb25256a588]
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:0x7fb25219e010 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:0x7fb25256a588
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:8
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent : 0x7fb25219e010
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fb252520618
Sg_File_Info* p_endOfConstruct : 0x7fb2525205c0
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 : 0x7fb252e27010
SgInitializer* p initptr: 0x7fb25201a010
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7fb252080010
SgStorageModifier* p_storageModifier: 0x25f64a8
SgScopeStatement* p_scope : 0x7fb252316010
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:0x7fb25201a010 SgAssignInitializer compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

SgType\* p\_expression\_type: 0

```
SgNode* p_parent : 0x7fb25256a588
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fb252520880
Sg_File_Info* p_endOfConstruct : 0x7fb252520828
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: 0x7fb252520568
bool p_is_explicit_cast: 1
bool p_is_braced_initialized: 0
SgExpression* p_operand_i : 0x7fb25204d010
```

pointer:0x7fb25204d010 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

std::string p\_valueString: 0

SgNode\* p\_parent: 0x7fb25201a010
bool p\_isModified: 0
bool p\_containsTransformation: 0
\$CLASSNAME\* p\_freepointer: 0xffffffffffffff
Sg\_File\_Info\* p\_startOfConstruct: 0x7fb252520778
Sg\_File\_Info\* p\_endOfConstruct: 0x7fb2525207d0
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: 0x7fb252520510
SgExpression\* p\_originalExpressionTree: 0
int p\_value: 0

pointer:0x7fb251f81010 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 : 0x7fb252316010

bool p\_isModified : 0

bool p\_containsTransformation: 0

\$CLASSNAME\* p\_freepointer : 0xfffffffffffffffffffffffffffffffgg\_File\_Info\* p\_startOfConstruct : 0x7fb252520cf8 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252520d50

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 : 0x7fb251fb0010

pointer:0x7fb251fb0010 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 : 0x7fb251f81010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7fb252520c48 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252520ca0 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: 0x7fb2525209e0 SgExpression\* p\_lhs\_operand\_i : 0x7fb251fe7010 SgExpression\* p\_rhs\_operand\_i: 0x7fb251fe7078 SgType\* p\_expression\_type : 0

pointer:0x7fb251fe7010 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 : 0x7fb251fb0010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7fb252520a38 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252520a90 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: 0x7fb2525208d8 SgVariableSymbol\* p\_symbol : 0x265b7e0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7fb251fe7078 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 : 0x7fb251fb0010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7fb252520b40 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252520b98 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: 0x7fb252520720 SgVariableSymbol\* p\_symbol : 0x265b7b0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7fb251f4e010 SgPlusPlusOp /home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 4:25 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

```
SgNode* p_parent : 0x7fb252316010
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fb252520f08
Sg_File_Info* p_endOfConstruct : 0x7fb252520f60
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: 0x7fb252520ae8
SgExpression* p_operand_i: 0x7fb251fe70e0
SgType* p_expression_type: 0
SgUnaryOp::Sgop_mode p_mode : 1
```

pointer:0x7fb251fe70e0 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

SgNode\* p\_parent : 0x7fb251f4e010

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7fb252520e00 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252520e58 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 : 0x7fb252520bf0 SgVariableSymbol\* p\_symbol : 0x265b7e0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7fb25243c128
SgBasicBlock
/home/liao6/workspace/github/rose-ast.git/accumulationStmt.c 5:3
IsTransformation:0
IsOutputInCodeGeneration:0

# Click here to go to the parent node

SgNode\* p\_parent : 0x7fb252316010

```
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb252520fb8
Sg_File_Info* p_endOfConstruct : 0x7fb252521010
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: 0x7fb2537c1730
SgTypeTable* p_type_table: 0x1ba3510
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7fb251f81070, 0x7fb251f810d0]
std::string p_asm_function_body :
```

pointer:0x7fb251f81070 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: 0x7fb25243c128

bool p\_isModified : 0

bool p\_containsTransformation: 0

\$CLASSNAME\* p\_freepointer : 0xfffffffffffff

Sg\_File\_Info\* p\_startOfConstruct : 0x7fb252521590 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb2525215e8

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: 0x7fb251ee0010

pointer:0x7fb251ee0010 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

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7fb251f81070
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb2525214e0
Sg_File_Info* p_endOfConstruct : 0x7fb252521538
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: 0x7fb252521278
SgExpression* p_lhs_operand_i : 0x7fb251f17010
SgExpression* p_rhs_operand_i : 0x7fb251fe7218
SgType* p_expression_type : 0
```

pointer:0x7fb251f17010 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 : 0x7fb251ee0010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fb2525212d0
Sg_File_Info* p_endOfConstruct : 0x7fb252521328
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: 0x7fb252521068
SgExpression* p_lhs_operand_i: 0x7fb251fe7148
SgExpression* p_rhs_operand_i : 0x7fb251fe71b0
SgType* p_expression_type : 0
```

pointer:0x7fb251fe7148 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

SgNode\* p\_parent : 0x7fb251f17010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7fb2525210c0 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252521118 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: 0x7fb252520eb0 SgVariableSymbol\* p\_symbol : 0x265b750 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7fb251fe71b0 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 : 0x7fb251f17010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7fb2525211c8 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252521220 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: 0x7fb252520da8 SgVariableSymbol\* p\_symbol : 0x265b7e0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7fb251fe7218 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

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7fb251ee0010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7fb2525213d8 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb252521430 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: 0x7fb252521170 SgVariableSymbol\* p\_symbol : 0x265b780 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7fb251f810d0 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 : 0x7fb25243c128

bool p\_isModified : 0

bool p\_containsTransformation: 0

Sg\_File\_Info\* p\_startOfConstruct : 0x7fb252521748 Sg\_File\_Info\* p\_endOfConstruct : 0x7fb2525217a0

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: 0x7fb251eb8010

pointer:0x7fb251eb8010 SgNullExpression compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1

Expression type: int

# Click here to go to the parent node

SgNode\* p\_parent: 0x7fb251f810d0
bool p\_isModified: 0
bool p\_containsTransformation: 0
\$CLASSNAME\* p\_freepointer: 0xffffffffffffff
Sg\_File\_Info\* p\_startOfConstruct: 0x7fb252521698
Sg\_File\_Info\* p\_endOfConstruct: 0x7fb2525216f0
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: 0x7fb252521488