# pointer:0x7f01a1701010 SgSourceFile

SgNode\* p\_parent: 0x25c3360

root node

```
bool p isModified: 0
bool p_containsTransformation: 0
Sq File Info* p startOfConstruct: 0x7f01a18b4068
SgStringList p_originalCommandLineArgumentList : [pdfGenerator, -std=c++11, -c, indirectLambdaCall.cxx]
int p_verbose : 0
bool p_output_warnings: 0
bool p_C_only: 0
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: 0
bool p_C99_gnu_only: 0
bool p_Cxx_only: 1
bool p_C11_only: 0
bool p_C11_gnu_only: 0
bool p_Cxx0x_only: 0
bool p_Cxx11_only: 1
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:0x7f01a182f120 SgGlobal /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f01a1701010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a18b40c0
Sg_File_Info* p_endOfConstruct : 0x7f01a18b4118
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: 0x7f01a17e4140
SgTypeTable* p_type_table: 0x25fdda8
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>: [0x7f01a1556010, 0x7f01a15562b0, 0x7f01a1087010, 0x7f016087010, 0x7f016087010, 0x7f016087010, 0x7f016087010, 0x7f016087010, 0x7f016087010, 0x7f016087010, 0x7f016087010,
```

pointer:0x7f01a00cd010 SgNamespaceDeclarationStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 4:1 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: RAJA

Click here to go to the parent node

bool p\_isUnnamedNamespace : 0
bool p\_isInlinedNamespace : 0

```
SgNode* p_parent : 0x7f01a182f120
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c0258
Sg_File_Info* p_endOfConstruct : 0x7f01a02c02b0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0x27d57b0
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: 1
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p_definingDeclaration: 0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f01a00cd010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name: RAJA
SgNamespaceDefinitionStatement* p_definition: 0x7f01a01fe010
```

pointer:0x7f01a01fe010 SgNamespaceDefinitionStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 5:1 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f01a00cd010
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a0d4b0c0
Sg_File_Info* p_endOfConstruct : 0x7f01a0d6c958
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0x2fc6770
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f01a17e43a0
SgTypeTable* p type table: 0x25fddf8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgDeclarationStatementPtrList p_declarations: [0x7f01a155e890, 0x7f019fddd440, 0x7f019f9b32b0, 0x7f019fdddca0]
SgNamespaceDeclarationStatement* p_namespaceDeclaration: 0x7f01a00cd010
SgNamespaceDefinitionStatement* p_previousNamespaceDefinition: 0
SgNamespaceDefinitionStatement* p_nextNamespaceDefinition: 0
SgNamespaceDefinitionStatement* p_global_definition: 0x7f01a01fe148
bool p isUnionOfReentrantNamespaceDefinitions: 0
```

```
Declaration mangled name: L5R
  Click here to go to the parent node
SgNode* p_parent : 0x7f01a01fe010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c0308
Sg_File_Info* p_endOfConstruct : 0x7f01a02c0360
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: 0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f01a155e890
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name: Index_type
SgType* p_base_type: 0x7f01a137b010
SgTypedefType* p_type: 0x7f01a1514550
SgDeclarationStatement* p_declaration: 0
```

pointer:0x7f01a155e890 SgTypedefDeclaration

IsOutputInCodeGeneration:0

SgSymbol\* p parent scope: 0x7f01a009a010

SgScopeStatement\* p\_scope: 0x7f01a01fe010
bool p\_requiresGlobalNameQualificationOnType: 0
int p\_name\_qualification\_length\_for\_base\_type: 0
bool p\_type\_elaboration\_required\_for\_base\_type: 0
bool p\_global\_qualification\_required\_for\_base\_type: 0

bool p\_isAutonomousDeclaration : 1
bool p\_isAssociatedWithDeclarationList : 0
bool p\_isFirstDeclarationOfDeclarationList : 1

bool p\_typedefBaseTypeContainsDefiningDeclaration : 0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 6:3

```
SgTemplateFunctionDeclaration
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 10:3
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L9R__L10R
   Click here to go to the parent node
SgNode* p_parent : 0x7f01a01fe010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c1228
Sg_File_Info* p_endOfConstruct : 0x7f01a02c0410
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0x2fc3f90
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: 0x7f019fddd440
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f019fddd010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgName p_name: forall
SgFunctionParameterList* p_parameterList : 0x7f01a0822860
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: 0x7f01a127b470
SgFunctionDefinition* p_definition: 0x7f019fcbf010
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f01a01fe010
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
SgTemplateParameterPtrList p_templateParameters : [0x7f01a001c010, 0x7f01a001c070]
SgTemplateArgumentPtrList p_templateSpecializationArguments : []
SgName p_string: <too long>: <too long>: template < typename EXEC_POLICY_T, typename LOOP_BODY >
                                                                                                           void for
bool p string represents function body: 0
```

pointer:0x7f019fddd440

pointer:0x7f01a0822860 SgFunctionParameterList /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 11:5 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L10R

SgInitializedNamePtrList p\_args: [0x7f01a03af978, 0x7f01a03afac0, 0x7f01a03afc08]

```
SgNode* p_parent : 0x7f019fddd440
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c0b48
Sg_File_Info* p_endOfConstruct : 0x7f01a02c0ba0
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: 0x7f01a0822860
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
```

```
pointer:0x7f01a03af978
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 11:30
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent : 0x7f01a0822860
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a02c07d8
Sg_File_Info* p_endOfConstruct : 0x7f01a02c0830
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: begin
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019fddd440
SgStorageModifier* p_storageModifier : 0x3253778
SgScopeStatement* p_scope : 0x7f019fcbf010
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:0x7f01a03afac0 SgInitializedName /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 11:48 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p parent : 0x7f01a0822860
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a02c0888
Sg_File_Info* p_endOfConstruct : 0x7f01a02c08e0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: end
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019fddd440
SgStorageModifier* p_storageModifier : 0x32537a0
SgScopeStatement* p_scope : 0x7f019fcbf010
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:0x7f01a03afc08 SgInitializedName /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 11:63 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p parent : 0x7f01a0822860
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a02c0938
Sg_File_Info* p_endOfConstruct : 0x7f01a02c0990
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgName p name: loop body
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f01a004b0b0
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019fddd440
SgStorageModifier* p_storageModifier : 0x32537c8
SgScopeStatement* p_scope : 0x7f019fcbf010
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:0x7f019fcbf010 SgTemplateFunctionDefinition /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 12:5 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019fddd440
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c09e8
Sg_File_Info* p_endOfConstruct : 0x7f01a02c0a40
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: 0x7f01a17e4730
SgTypeTable* p_type_table: 0x25fde70
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7f019fd54010
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7f019fd54010 SgBasicBlock /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 12:5 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019fcbf010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c0728
Sg_File_Info* p_endOfConstruct : 0x7f01a02c0780
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: 0x7f01a17e4600
SgTypeTable* p_type_table: 0x25fde48
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f019fb85010]
std::string p_asm_function_body :
```

pointer:0x7f019fb85010 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54010

bool p\_isModified : 0

bool p\_containsTransformation: 0

\$CLASSNAME\* p\_freepointer : 0xfffffffffffff

Sg\_File\_Info\* p\_startOfConstruct : 0x7f01a02c1438 Sg\_File\_Info\* p\_endOfConstruct : 0x7f01a02c1490

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: 0x7f019fbb4010

pointer:0x7f019fbb4010 SgFunctionCallExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:14 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: void

### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fb85010

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f01a02c1388 Sg\_File\_Info\* p\_endOfConstruct : 0x7f01a02c13e0 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: 0x7f01a02c1120 SgExpression\* p\_function: 0x7f019fc90010 SgExprListExp\* p\_args : 0x7f019fc1e078 SgType\* p\_expression\_type : 0x7f01a127b470 bool p\_uses\_operator\_syntax: 0

IsOutputInCodeGeneration:0 Expression type: void(::RAJA::Index\_type, ::RAJA::Index\_type, LOOP\_BODY) Click here to go to the parent node SgNode\* p\_parent : 0x7f019fbb4010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f01a02c0c50 Sg\_File\_Info\* p\_endOfConstruct : 0x7f01a02c0ca8 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: 0x7f01a02c0a98 SgTemplateFunctionSymbol\* p\_symbol\_i : 0x32d0790

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:7

pointer:0x7f019fc90010 SgTemplateFunctionRefExp

int p\_name\_qualification\_length : 0
bool p\_type\_elaboration\_required : 0
bool p\_global\_qualification\_required : 0

IsTransformation:0

pointer:0x7f019fc1e078 SgExprListExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent: 0x7f019fbb4010
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f01a02c1280
Sg_File_Info* p_endOfConstruct: 0x7f01a02c12d8
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: 0x7f01a02c1018
```

SgExpressionPtrList p\_expressions: [0x7f019fc51010, 0x7f019fbeb010, 0x7f019fbeb078, 0x7f019fbeb0e0]

pointer:0x7f019fc51010
SgConstructorInitializer
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:16
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: EXEC\_POLICY\_T

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fc1e078

bool p\_global\_qualification\_required: 0

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c0af0
Sg_File_Info* p_endOfConstruct : 0x7f01a02c0e60
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: 0x7f01a02c0d58
bool p_is_explicit_cast: 1
bool p_is_braced_initialized: 0
SgMemberFunctionDeclaration* p_declaration: 0
SgExprListExp* p_args: 0x7f019fc1e010
SgType* p_expression_type : 0x7f01a004b010
bool p need name: 1
bool p_need_qualifier: 0
bool p_need_parenthesis_after_name: 1
bool p associated class unknown: 1
int p_name_qualification_length: 0
bool p_type_elaboration_required: 0
```

pointer:0x7f019fc1e010 SgExprListExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

SgExpressionPtrList p\_expressions : []

```
SgNode* p_parent: 0x7f019fc51010
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xfffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f01a02c0d00
Sg_File_Info* p_endOfConstruct: 0x7f01a02c0bf8
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: 0x7f01a02c0db0
```

pointer:0x7f019fbeb010 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:33 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019fc1e078 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f01a02c0f68 Sg\_File\_Info\* p\_endOfConstruct : 0x7f01a02c0fc0 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: 0x7f01a02c0e08 SgVariableSymbol\* p\_symbol: 0x32e80e0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb078 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:40 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019fc1e078 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f01a02c1070 Sg\_File\_Info\* p\_endOfConstruct : 0x7f01a02c10c8 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: 0x7f01a02c0eb8 SgVariableSymbol\* p\_symbol: 0x32e8110 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb0e0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:45 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: LOOP\_BODY

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019fc1e078 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f01a02c1178 Sg\_File\_Info\* p\_endOfConstruct : 0x7f01a02c11d0 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 : 0x7f01a02c0f10 SgVariableSymbol\* p\_symbol: 0x32e8140 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

```
Click here to go to the parent node
SgNode* p_parent : 0x7f01a01fe010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c1648
Sg_File_Info* p_endOfConstruct : 0x7f01a02c16a0
AttachedPreprocessingInfoType* p attachedPreprocessingInfoPtr: 0x2fc34f0
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: 0
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p definingDeclaration: 0x7f019f9b32b0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f019f9b3010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name : seq_exec
SgClassDeclaration::class_types p_class_type: 1
SgClassType* p_type: 0x7f019f974010
SgClassDefinition* p_definition: 0x7f019f8df010
SgScopeStatement* p_scope : 0x7f01a01fe010
SgDeclarationStatement::template_specialization_enum p_specialization: 1
bool p_from_template: 0
bool p_fixupScope: 0
bool p_isUnNamed: 0
bool p_explicit_annotation_interface: 0
bool p explicit interface: 0
bool p_explicit_enum: 0
bool p_explicit_anonymous: 0
SgExprListExp* p_decoratorList: 0
int p_name_qualification_length: 0
bool p type elaboration required: 0
bool p_global_qualification_required: 0
bool p_isAutonomousDeclaration: 1
bool p isRepresentingTemplateParameterInTemplateDeclaration: 0
```

pointer:0x7f019f9b32b0 SgClassDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 18:3

Declaration mangled name: RAJA\_scope\_class\_seq\_exec

pointer:0x7f019f8df010 SgClassDefinition /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 18:3 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

bool p\_isAbstract: 0

```
SgNode* p_parent : 0x7f019f9b32b0
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a02c15f0
Sg_File_Info* p_endOfConstruct : 0x7f01a02c1598
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: 0x7f01a17e4860
SgTypeTable* p_type_table: 0x25fde98
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgDeclarationStatementPtrList p_members : []
SgBaseClassPtrList p_inheritances : []
unsigned int p_packingAlignment: 0
bool p isSequence: 0
bool p_isPrivate: 0
```

```
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L11R__L12R
   Click here to go to the parent node
SgNode* p_parent : 0x7f01a01fe010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b5140
Sg_File_Info* p_endOfConstruct : 0x7f01a02c16f8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0x2fc53c0
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: 0x7f019fdddca0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f019fddd870
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name: forall
SgFunctionParameterList* p_parameterList : 0x7f01a0822d00
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 : 0x7f01a127b500
SgFunctionDefinition* p_definition: 0x7f019fcbf140
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f01a01fe010
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
SgTemplateParameterPtrList p_templateParameters : [0x7f01a001c0d0]
SgTemplateArgumentPtrList p_templateSpecializationArguments : []
SgName p_string : <too long>: <too long>: template < typename LOOP_BODY >
                                                                               void forall ( seq_exec, Index_ty
bool p string represents function body: 0
```

pointer:0x7f019fdddca0

SgTemplateFunctionDeclaration

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 23:3

pointer:0x7f01a0822d00 SgFunctionParameterList /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 24:5 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L12R

Click here to go to the parent node

```
SgNode* p_parent : 0x7f019fdddca0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b4068
Sg_File_Info* p_endOfConstruct : 0x7f019f8b40c0
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: 0x7f01a0822d00
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
```

SgInitializedNamePtrList p\_args: [0x7f01a03b0270, 0x7f01a03b03b8, 0x7f01a03b0500, 0x7f01a03b0648]

```
pointer:0x7f01a03b0270
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 24:19
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent: 0x7f01a0822d00
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a02c1bc8
Sg_File_Info* p_endOfConstruct : 0x7f01a02c1c20
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SaName p name:
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f019f974010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019fdddca0
SgStorageModifier* p_storageModifier : 0x3253890
SgScopeStatement* p_scope : 0x7f019fcbf140
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:0x7f01a03b03b8
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 24:40
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent: 0x7f01a0822d00
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a02c1c78
Sg_File_Info* p_endOfConstruct : 0x7f01a02c1cd0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: begin
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019fdddca0
SgStorageModifier* p_storageModifier : 0x32538b8
SgScopeStatement* p_scope : 0x7f019fcbf140
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:0x7f01a03b0500
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 24:58
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent: 0x7f01a0822d00
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a02c1d28
Sg_File_Info* p_endOfConstruct : 0x7f01a02c1d80
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: end
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019fdddca0
SgStorageModifier* p_storageModifier : 0x32538e0
SgScopeStatement* p_scope : 0x7f019fcbf140
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:0x7f01a03b0648
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 24:73
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent: 0x7f01a0822d00
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f01a02c1dd8
Sg_File_Info* p_endOfConstruct : 0x7f01a02c1e30
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgName p name: loop body
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f01a004b150
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019fdddca0
SgStorageModifier* p_storageModifier : 0x3253908
SgScopeStatement* p_scope : 0x7f019fcbf140
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:0x7f019fcbf140 SgTemplateFunctionDefinition /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 25:5 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019fdddca0
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c1e88
Sg_File_Info* p_endOfConstruct : 0x7f01a02c1ee0
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: 0x7f01a17e4ac0
SgTypeTable* p_type_table: 0x25fdee8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7f019fd54128
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7f019fd54128 SgBasicBlock /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 25:5 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

std::string p\_asm\_function\_body :

```
SgNode* p_parent : 0x7f019fcbf140
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f01a02c1b18
Sg_File_Info* p_endOfConstruct : 0x7f01a02c1b70
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: 0x7f01a17e4990
SgTypeTable* p_type_table : 0x25fdec0
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f019fb85070, 0x7f019f7fb010, 0x7f019fb85190]
```

pointer:0x7f019fb85070 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 26:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54128

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: 0x7f019f88c010

pointer:0x7f019f88c010 SgNullExpression compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

bool p\_global\_qualified\_name : 0

Sg\_File\_Info\* p\_operatorPosition: 0x7f01a02c1f38

SgNode\* p\_parent : 0x7f019fb85070
bool p\_isModified : 0
bool p\_containsTransformation : 0
\$CLASSNAME\* p\_freepointer : 0xfffffffffffff
Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b4170
Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b41c8
AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism\* p\_attributeMechanism : 0
bool p\_containsTransformationToSurroundingWhitespace : 0
bool p\_lvalue : 0

pointer:0x7f019f7fb010 SgForStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

std::string p\_string\_label:

```
SgNode* p_parent : 0x7f019fd54128
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b52f8
Sg_File_Info* p_endOfConstruct : 0x7f019f8b5350
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: 0x7f01a17e4bf0
SgTypeTable* p_type_table : 0x25fdf10
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 : 0x7f019f7c4080
SgStatement* p_test : 0x7f019fb850d0
SgExpression* p_increment: 0x7f019f4c8010
SgStatement* p loop body: 0x7f019fd54240
SgStatement* p_else_body: 0
```

pointer:0x7f019f7c4080 SgForInitStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:13 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f7fb010

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

SgStatementPtrList p\_init\_stmt : [0x7f019f683010]

```
Click here to go to the parent node
SqNode* p parent: 0x7f019f7c4080
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b4430
Sg_File_Info* p_endOfConstruct : 0x7f019f8b4488
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: 0x7f019f683010
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables: [0x7f01a03b0790]
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:0x7f019f683010 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:13

Declaration mangled name: \_variable\_declaration\_\_variable\_type\_L5R\_variable\_name\_L11R\_\_L12R\_\_scope\_

```
pointer:0x7f01a03b0790
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:13
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent : 0x7f019f683010
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b43d8
Sg_File_Info* p_endOfConstruct : 0x7f019f8b4380
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SaName p name : ii
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0x7f019f532010
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f565010
SgStorageModifier* p_storageModifier : 0x3253930
SgScopeStatement* p_scope : 0x7f019f7fb010
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:0x7f019f532010 SgAssignInitializer compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1

SgType\* p\_expression\_type: 0

Expression type: ::RAJA::Index\_type

### Click here to go to the parent node

SgNode\* p\_parent : 0x7f01a03b0790 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b4640 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b45e8 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: 0x7f019f8b4328 bool p\_is\_explicit\_cast: 1 bool p\_is\_braced\_initialized: 0 SgExpression\* p\_operand\_i: 0x7f019fbeb148

pointer:0x7f019fbeb148 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:29 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f532010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b4538 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b4590 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 : 0x7f019f8b42d0 SgVariableSymbol\* p\_symbol : 0x32e81a0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fb850d0 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:36 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f7fb010

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: 0x7f019f4fb010

pointer:0x7f019f4fb010 SgLessThanOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:39 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: bool

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019fb850d0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b4a08
Sg_File_Info* p_endOfConstruct : 0x7f019f8b4a60
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 : 0x7f019f8b47a0
SgExpression* p_lhs_operand_i : 0x7f019fbeb1b0
SgExpression* p_rhs_operand_i: 0x7f019fbeb218
SgType* p_expression_type : 0
```

pointer:0x7f019fbeb1b0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:36 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

## Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f4fb010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b47f8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b4850 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: 0x7f019f8b4698 SgVariableSymbol\* p\_symbol: 0x32e8230 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb218 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:41 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

# Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f4fb010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b4900 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b4958 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 : 0x7f019f8b44e0 SgVariableSymbol\* p\_symbol : 0x32e81d0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

SgPlusPlusOp
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:46
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: ::RAJA::Index\_type

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f7fb010

pointer:0x7f019f4c8010

SgUnaryOp::Sgop\_mode p\_mode: 0

bool p\_isModified: 0
bool p\_containsTransformation: 0
\$CLASSNAME\* p\_freepointer: 0xfffffffffffff
Sg\_File\_Info\* p\_startOfConstruct: 0x7f019f8b4cc8
Sg\_File\_Info\* p\_endOfConstruct: 0x7f019f8b4d20
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: 0x7f019f8b48a8
SgExpression\* p\_operand\_i: 0x7f019fbeb280
SgType\* p\_expression\_type: 0

pointer:0x7f019fbeb280 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:49 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f4c8010

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b4bc0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b4c18 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 : 0x7f019f8b49b0 SgVariableSymbol\* p\_symbol: 0x32e8230 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019fd54240 SgBasicBlock /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:54 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019f7fb010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b4d78
Sg_File_Info* p_endOfConstruct : 0x7f019f8b4dd0
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: 0x7f01a17e4d20
SgTypeTable* p_type_table: 0x25fdf38
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f019fb85130]
std::string p_asm_function_body :
```

pointer:0x7f019fb85130 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 29:9 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54240

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: 0x7f019fbb4080

pointer:0x7f019fbb4080 SgFunctionCallExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 29:19 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: UNKNOWN

### Click here to go to the parent node

bool p\_uses\_operator\_syntax: 0

SgNode\* p\_parent : 0x7f019fb85130 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b5198 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b51f0 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 : 0x7f019f8b4f30 SgExpression\* p\_function: 0x7f019fbeb2e8 SgExprListExp\* p\_args : 0x7f019fc1e0e0 SgType\* p\_expression\_type : 0x7f01a004b150

pointer:0x7f019fbeb2e8 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 29:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: LOOP\_BODY

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019fbb4080 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b4e80 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b4ed8 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 : 0x7f019f8b4c70 SgVariableSymbol\* p\_symbol: 0x32e8200 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fc1e0e0 SgExprListExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent: 0x7f019fbb4080
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xfffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f019f8b5090
Sg_File_Info* p_endOfConstruct: 0x7f019f8b50e8
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: 0x7f019f8b4e28
```

SgExpressionPtrList p\_expressions : [0x7f019fbeb350]

pointer:0x7f019fbeb350 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 29:21 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fc1e0e0 bool p\_isModified : 0

bool p\_containsTransformation: 0

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: 0x7f019f8b4b68

SgVariableSymbol\* p\_symbol : 0x32e8230 SgExpression\* p\_originalExpressionTree : 0

int p\_name\_qualification\_length : 0
bool p\_type\_elaboration\_required : 0
bool p\_global\_qualification\_required : 0

pointer:0x7f019fb85190 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 31:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54128

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: 0x7f019f88c060

pointer:0x7f019f88c060 SgNullExpression compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fb85190
bool p\_isModified : 0
bool p\_containsTransformation : 0
\$CLASSNAME\* p\_freepointer : 0xfffffffffffff
Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b5400
Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b5458
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 : 0x7f019f8b5038

```
SgTemplateInstantiationFunctionDecl
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L13R
   Click here to go to the parent node
SgNode* p_parent : 0x7f01a182f120
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b5928
Sg_File_Info* p_endOfConstruct : 0x7f019f8b58d0
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: 0
bool p_forward: 1
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p definingDeclaration: 0x7f019f2c4c70
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f019f2c4010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name : forall < seq_exec , >
SgFunctionParameterList* p_parameterList: 0x7f01a0822f50
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: 0x7f01a127b590
SgFunctionDefinition* p_definition: 0
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f01a01fe010
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_prototypelsWithoutParameters: 0
int p_gnu_regparm_attribute: -1
SgFunctionType* p type syntax: 0x7f01a127b590
bool p_type_syntax_is_available: 1
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
SgName p_templateName : forall
SgTemplateFunctionDeclaration* p_templateDeclaration: 0x7f019fddd010
SgTemplateArgumentPtrList p_templateArguments: [0x7f019ffe9148, 0x7f019ffe91b0]
bool p nameResetFromMangledForm: 1
```

pointer:0x7f019f2c4010

pointer:0x7f01a0822f50 SgFunctionParameterList compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L14R

```
SgNode* p_parent: 0x7f019f2c4010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b5560
Sg_File_Info* p_endOfConstruct : 0x7f019f8b55b8
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: 0x7f01a0822f50
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgInitializedNamePtrList p_args: [0x7f01a03b08d8, 0x7f01a03b0a20, 0x7f01a03b0b68]
```

pointer:0x7f01a03b08d8 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SqNode* p parent : 0x7f01a0822f50
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b5610
Sg_File_Info* p_endOfConstruct : 0x7f019f8b5668
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: begin
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4010
SgStorageModifier* p_storageModifier : 0x3253958
SgScopeStatement* p_scope : 0x7f01a01fe010
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:0x7f01a03b0a20 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SqNode* p parent : 0x7f01a0822f50
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b56c0
Sg_File_Info* p_endOfConstruct : 0x7f019f8b5718
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: end
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4010
SgStorageModifier* p_storageModifier : 0x3253980
SgScopeStatement* p_scope : 0x7f01a01fe010
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:0x7f01a03b0b68 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SqNode* p parent : 0x7f01a0822f50
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b5820
Sg_File_Info* p_endOfConstruct : 0x7f019f8b5878
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: loop body
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f019f974090
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4010
SgStorageModifier* p_storageModifier : 0x32539a8
SgScopeStatement* p_scope : 0x7f01a01fe010
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
```

```
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L6R__L7R
  Click here to go to the parent node
SgNode* p_parent : 0x7f01a182f120
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b59d8
Sg_File_Info* p_endOfConstruct : 0x7f019f8b5980
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: 0x7f01a06d29e0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f01a06d2610
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name: foo
SgFunctionParameterList* p_parameterList: 0x7f01a08233f0
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: 0x7f01a127b620
SgFunctionDefinition* p_definition: 0x7f019f22f010
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f01a182f120
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:0x7f01a06d29e0 SgFunctionDeclaration

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:1

pointer:0x7f01a08233f0 SgFunctionParameterList /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:1 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L7R

Click here to go to the parent node

SgNode\* p\_parent : 0x7f01a06d29e0

std::string p\_binding\_label:

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b6530
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6588
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: 0x7f01a08233f0
SgQualifiedNamePtrList p_qualifiedNameList : []
```

SgInitializedNamePtrList p\_args: <too long>: <too long>: [0x7f01a03b1460, 0x7f01a03b15a8, 0x7f01a03b16f0, 0x7f01a03b1838, 0x7

```
pointer:0x7f01a03b1460
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:18
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent : 0x7f01a08233f0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b5fb0
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6008
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: x
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f01a104c268
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f01a06d29e0
SgStorageModifier* p_storageModifier : 0x3253ac0
SgScopeStatement* p_scope : 0x7f019f22f010
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:0x7f01a03b15a8
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:25
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent : 0x7f01a08233f0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b6060
Sg_File_Info* p_endOfConstruct : 0x7f019f8b60b8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: ip
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f01a137b010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f01a06d29e0
SgStorageModifier* p_storageModifier : 0x3253ae8
SgScopeStatement* p_scope : 0x7f019f22f010
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:0x7f01a03b16f0
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:33
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent : 0x7f01a08233f0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b6110
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6168
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SaName p name: kp
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f01a137b010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f01a06d29e0
SgStorageModifier* p_storageModifier : 0x3253b10
SgScopeStatement* p_scope : 0x7f019f22f010
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:0x7f01a03b1838
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:54
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent : 0x7f01a08233f0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b61c0
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6218
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: begin
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f01a06d29e0
SgStorageModifier* p_storageModifier : 0x3253b38
SgScopeStatement* p_scope : 0x7f019f22f010
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:0x7f01a03b1980
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:78
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent : 0x7f01a08233f0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b6270
Sg_File_Info* p_endOfConstruct : 0x7f019f8b62c8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: end
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f01a06d29e0
SgStorageModifier* p_storageModifier : 0x3253b60
SgScopeStatement* p_scope : 0x7f019f22f010
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:0x7f01a03b1ac8
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:90
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent : 0x7f01a08233f0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b6320
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6378
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: rh1
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f01a0f32010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f01a06d29e0
SgStorageModifier* p_storageModifier : 0x3253b88
SgScopeStatement* p_scope : 0x7f019f22f010
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:0x7f019f22f010 SgFunctionDefinition /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 39:1 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f01a06d29e0
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b63d0
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6428
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: 0x7f01a17e4f80
SgTypeTable* p_type_table : 0x25fdf88
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7f019fd54358
std::map<SgNode*,int> p_scope_number_list : [0x7f019f22f010->1, 0x7f019fd54358->2]
```

pointer:0x7f019fd54358 SgBasicBlock /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 39:1 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f22f010

std::string p\_asm\_function\_body :

```
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b5f00
Sg_File_Info* p_endOfConstruct : 0x7f019f8b5f58
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: 0x7f01a17e4e50
SgTypeTable* p_type_table: 0x25fdf60
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : <too long>: <too long>: [0x7f019f6832a0, 0x7f019f683530, 0x7f019f6837c0, 0x7f019f683a50, 0x7
```

```
Click here to go to the parent node
SqNode* p parent: 0x7f019fd54358
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b6740
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6798
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0x2814b80
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: 0x7f019f6832a0
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables: [0x7f01a03b1c10]
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: 1
bool p_isFirstDeclarationOfDeclarationList: 1
bool p is thread local: 0
bool p_is_constexpr: 0
```

Declaration mangled name: \_variable\_declaration\_\_variable\_type\_\_\_Pb\_\_d\_Pe\_\_\_variable\_name\_L6R\_\_L7R\_\_scope

SgSS2

pointer:0x7f019f6832a0 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4

```
pointer:0x7f01a03b1c10
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent : 0x7f019f6832a0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b66e8
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6690
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: x1
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f01a104c268
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f565258
SgStorageModifier* p_storageModifier : 0x3253bb0
SgScopeStatement* p_scope : 0x7f019fd54358
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
```

```
Click here to go to the parent node
SqNode* p parent: 0x7f019fd54358
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b6950
Sg_File_Info* p_endOfConstruct : 0x7f019f8b69a8
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: 0x7f019f683530
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables: [0x7f01a03b1d58]
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: 1
bool p_isFirstDeclarationOfDeclarationList: 1
bool p is thread local: 0
bool p_is_constexpr: 0
```

Declaration mangled name: \_variable\_declaration\_\_variable\_type\_\_\_Pb\_\_d\_Pe\_\_\_variable\_name\_L6R\_\_L7R\_\_scope

SgSS2

pointer:0x7f019f683530 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4

```
pointer:0x7f01a03b1d58
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7f019f683530
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b68f8
Sg_File_Info* p_endOfConstruct : 0x7f019f8b68a0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: x2
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f01a104c268
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f5654a0
SgStorageModifier* p_storageModifier : 0x3253bd8
SgScopeStatement* p_scope : 0x7f019fd54358
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
```

```
Click here to go to the parent node
SqNode* p parent: 0x7f019fd54358
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b6b60
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6bb8
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: 0x7f019f6837c0
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables: [0x7f01a03b1ea0]
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: 1
bool p_isFirstDeclarationOfDeclarationList: 1
bool p is thread local: 0
bool p_is_constexpr: 0
```

Declaration mangled name: \_variable\_declaration\_\_variable\_type\_\_\_Pb\_\_d\_Pe\_\_\_variable\_name\_L6R\_\_L7R\_\_scope

SgSS2

pointer:0x7f019f6837c0 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4

```
pointer:0x7f01a03b1ea0
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4
IsTransformation:0
IsOutputInCodeGeneration:0
```

Click here to go to the parent node

```
SqNode* p parent: 0x7f019f6837c0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b6b08
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6ab0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: x3
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f01a104c268
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f5656e8
SgStorageModifier* p_storageModifier : 0x3253c00
SgScopeStatement* p_scope : 0x7f019fd54358
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
```

```
Click here to go to the parent node
SqNode* p parent: 0x7f019fd54358
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b6d70
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6dc8
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: 0x7f019f683a50
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables : [0x7f01a03b1fe8]
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: 1
bool p_isFirstDeclarationOfDeclarationList: 1
bool p is thread local: 0
bool p_is_constexpr: 0
```

Declaration mangled name: \_variable\_declaration\_\_variable\_type\_\_\_Pb\_\_d\_Pe\_\_\_variable\_name\_L6R\_\_L7R\_\_scope

SgSS2

pointer:0x7f019f683a50 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4

```
pointer:0x7f01a03b1fe8
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4
IsTransformation:0
IsOutputInCodeGeneration:0
```

Click here to go to the parent node

```
SqNode* p parent: 0x7f019f683a50
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b6d18
Sg_File_Info* p_endOfConstruct : 0x7f019f8b6cc0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: x4
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f01a104c268
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f565930
SgStorageModifier* p_storageModifier: 0x3253c28
SgScopeStatement* p_scope : 0x7f019fd54358
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:0x7f019fb851f0 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 44:4 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54358

bool p\_isModified : 0

bool p\_containsTransformation: 0

AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr : 0x2815670

AstAttributeMechanism\* p\_attributeMechanism: 0

bool p\_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp\* p\_numeric\_label : 0 int p\_source\_sequence\_value : -1

SgExpression\* p\_expression: 0x7f019f1f8010

pointer:0x7f019f1f8010 SgAssignOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 44:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

```
SgNode* p_parent: 0x7f019fb851f0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b7088
Sg_File_Info* p_endOfConstruct : 0x7f019f8b70e0
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: 0x7f019f8b6e20
SgExpression* p_lhs_operand_i : 0x7f019fbeb3b8
SgExpression* p_rhs_operand_i : 0x7f019fbeb420
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019fbeb3b8 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 44:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019f1f8010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b6e78 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b6ed0 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 : 0x7f019f8b6c10 SgVariableSymbol\* p\_symbol: 0x32e8380 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb420 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 44:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019f1f8010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b6f80 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b6fd8 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 : 0x7f019f8b6c68 SgVariableSymbol\* p\_symbol : 0x32e8260 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fb85250 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 45:4 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54358

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: 0x7f019f1f8080

pointer:0x7f019f1f8080 SgAssignOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 45:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019fb85250
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b7660
Sg_File_Info* p_endOfConstruct : 0x7f019f8b76b8
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: 0x7f019f8b71e8
SgExpression* p_lhs_operand_i : 0x7f019fbeb488
SgExpression* p_rhs_operand_i: 0x7f019f18e010
SgType* p_expression_type : 0
```

pointer:0x7f019fbeb488 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 45:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f1f8080 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b7240 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b7298 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 : 0x7f019f8b7030 SgVariableSymbol\* p\_symbol : 0x32e83b0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019f18e010 SgAddOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 45:11 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

#### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f1f8080 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b7558 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b75b0 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 : 0x7f019f8b7450 SgExpression\* p\_lhs\_operand\_i : 0x7f019fbeb4f0 SgExpression\* p\_rhs\_operand\_i : 0x7f019f1c5010 SgType\* p\_expression\_type : 0 SgExpression\* p\_originalExpressionTree : 0

pointer:0x7f019fbeb4f0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 45:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f18e010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b7348 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b73a0 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 : 0x7f019f8b6f28 SgVariableSymbol\* p\_symbol: 0x32e8260 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

```
pointer:0x7f019f1c5010
SgIntVal
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 45:12
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int
```

### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f18e010

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b73f8
Sg_File_Info* p_endOfConstruct : 0x7f019f8b72f0
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 : 0x7f019f8b74a8
SgExpression* p_originalExpressionTree : 0
int p_value: 1
std::string p_valueString: 1
```

pointer:0x7f019fb852b0 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 46:4 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54358

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: 0x7f019f1f80f0

pointer:0x7f019f1f80f0 SgAssignOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 46:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019fb852b0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b7c38
Sg_File_Info* p_endOfConstruct : 0x7f019f8b7c90
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 : 0x7f019f8b79d0
SgExpression* p_lhs_operand_i : 0x7f019fbeb558
SgExpression* p_rhs_operand_i : 0x7f019f18e080
SgType* p_expression_type : 0
```

pointer:0x7f019fbeb558 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 46:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f1f80f0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b7818 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b7870 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 : 0x7f019f8b7608 SgVariableSymbol\* p\_symbol : 0x32e83e0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019f18e080 SgAddOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 46:12 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019f1f80f0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b7b30
Sg_File_Info* p_endOfConstruct : 0x7f019f8b7b88
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: 0x7f019f8b78c8
SgExpression* p_lhs_operand_i : 0x7f019fbeb5c0
SgExpression* p_rhs_operand_i : 0x7f019fbeb628
SgType* p_expression_type : 0
```

pointer:0x7f019fbeb5c0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 46:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

# Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f18e080 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b7920 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b7978 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 : 0x7f019f8b7500 SgVariableSymbol\* p\_symbol: 0x32e8380 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb628 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 46:14 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f18e080 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b7a28 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b7a80 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 : 0x7f019f8b77c0 SgVariableSymbol\* p\_symbol: 0x32e8290 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fb85310 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 47:4 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54358

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: 0x7f019f1f8160

pointer:0x7f019f1f8160 SgAssignOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 47:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019fb85310
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b8210
Sg_File_Info* p_endOfConstruct : 0x7f019f8b8268
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: 0x7f019f8b7fa8
SgExpression* p_lhs_operand_i: 0x7f019fbeb690
SgExpression* p_rhs_operand_i : 0x7f019f18e0f0
SgType* p_expression_type : 0
```

pointer:0x7f019fbeb690 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 47:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019f1f8160 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b7df0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b7e48 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 : 0x7f019f8b7be0 SgVariableSymbol\* p\_symbol : 0x32e8410 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019f18e0f0 SgAddOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 47:12 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

SgNode\* p\_parent: 0x7f019f1f8160

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b8108
Sg_File_Info* p_endOfConstruct : 0x7f019f8b8160
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 : 0x7f019f8b7ea0
SgExpression* p_lhs_operand_i : 0x7f019fbeb6f8
SgExpression* p_rhs_operand_i : 0x7f019fbeb760
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019fbeb6f8 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 47:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

# Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f18e0f0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b7ef8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b7f50 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: 0x7f019f8b7ad8 SgVariableSymbol\* p\_symbol: 0x32e8380 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb760 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 47:14 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f18e0f0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b8000 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b8058 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: 0x7f019f8b7d98 SgVariableSymbol\* p\_symbol: 0x32e82c0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

```
Click here to go to the parent node
SqNode* p parent: 0x7f019fd54358
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b84d0
Sg_File_Info* p_endOfConstruct : 0x7f019f8b8528
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0x2817f60
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: 0x7f019f683ce0
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables: [0x7f01a03b2130]
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
```

Declaration mangled name: \_variable\_declaration\_\_variable\_type\_0x7f01a004b1f0\_variable\_name\_L6R\_\_L7R\_\_scope

SgSS2

pointer:0x7f019f683ce0 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 51:3

```
pointer:0x7f01a03b2130
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 51:3
IsTransformation:0
IsOutputInCodeGeneration:0
```

Click here to go to the parent node

```
SqNode* p parent: 0x7f019f683ce0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8b8478
Sg_File_Info* p_endOfConstruct : 0x7f019f8b8420
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SaName p name : kernel
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f01a004b1f0
SgInitializer* p initptr: 0x7f019f532078
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f565b78
SgStorageModifier* p_storageModifier : 0x3253c50
SgScopeStatement* p_scope : 0x7f019fd54358
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: 1
bool p_using_device_keyword: 0
bool p is braced initialized: 0
```

pointer:0x7f019f532078 SgAssignInitializer compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: void

SgType\* p\_expression\_type: 0

Click here to go to the parent node

```
SgNode* p_parent : 0x7f01a03b2130
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bd070
Sg_File_Info* p_endOfConstruct : 0x7f019f8bd018
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: 0x7f019f8bcf68
bool p_is_explicit_cast: 1
bool p_is_braced_initialized: 0
SgExpression* p_operand_i : 0x7f019ebd7010
```

```
pointer:0x7f019ebd7010
SgLambdaExp
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 51:17
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: void
```

#### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f532078

bool p\_is\_device: 0

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bcf10
Sg_File_Info* p_endOfConstruct : 0x7f019f8bcd58
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 : 0x7f019f8bcfc0
SgLambdaCaptureList* p_lambda_capture_list: 0x7f019f15f010
SgClassDeclaration* p_lambda_closure_class : 0x7f019f9b3550
SgFunctionDeclaration* p_lambda_function: 0x7f019eea93f0
bool p_is_mutable: 0
bool p_capture_default: 1
bool p default is by reference: 0
bool p_explicit_return_type: 0
bool p_has_parameter_decl: 1
```

pointer:0x7f019f15f010 SgLambdaCaptureList /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 51:17 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019ebd7010

bool p\_isModified: 0

bool p\_containsTransformation: 0

AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism\* p\_attributeMechanism: 0

 $\color{red} \textbf{bool} \ p\_contains Transformation To Surrounding White space: \textbf{0}$ 

SgLambdaCapturePtrList p\_capture\_list: <too long>: <too long>: [0x7f019f12c010, 0x7f019f12c078, 0x7f019f12c0e0, 0x7f019f12c148, 0x7f019f12c0e0, 0x7f019f12c0e0, 0x7f019f12c148, 0x7f019f12c0e0, 0x7f019f12c0e0

pointer:0x7f019f12c010 SgLambdaCapture /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 57:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

bool p\_pack\_expansion: 0

pointer:0x7f019fbeb7c8 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019f12c010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b8688 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b86e0 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 : 0x7f019f8b83c8 SgVariableSymbol\* p\_symbol: 0x32e8380 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb830 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 57:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019f12c010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b8bb0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b8c08 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: 0x7f019f8b8948 SgVariableSymbol\* p\_symbol: 0x32e8470 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019f12c078 SgLambdaCapture /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 57:16 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

bool p\_pack\_expansion: 0

pointer:0x7f019fbeb898 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 38:83 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f12c078 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b8d68 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b8dc0 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: 0x7f019f8b8b58 SgVariableSymbol\* p\_symbol: 0x32e8350 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb900 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 57:16 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f12c078 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b9080 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b90d8 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 : 0x7f019f8b8e18 SgVariableSymbol\* p\_symbol: 0x32e84a0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019f12c0e0 SgLambdaCapture /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 58:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

bool p\_pack\_expansion: 0

pointer:0x7f019fbeb968 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

# Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f12c0e0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b9238 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b9290 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: 0x7f019f8b9028 SgVariableSymbol\* p\_symbol : 0x32e83b0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbeb9d0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 58:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

# Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f12c0e0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b9550 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b95a8 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: 0x7f019f8b92e8 SgVariableSymbol\* p\_symbol: 0x32e84d0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019f12c148 SgLambdaCapture /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 59:7 IsTransformation:0 IsOutputInCodeGeneration:0

pointer:0x7f019fbeba38 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f12c148 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b9708 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b9760 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 : 0x7f019f8b94f8 SgVariableSymbol\* p\_symbol : 0x32e83e0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbebaa0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 59:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f12c148 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b9a20 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b9a78 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 : 0x7f019f8b97b8 SgVariableSymbol\* p\_symbol: 0x32e8500 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019f12c1b0 SgLambdaCapture /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 60:7 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019f15f010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffff
$g_File_Info* p_startOfConstruct : 0x7f019f8b9fa0
$g_File_Info* p_endOfConstruct : 0x7f019f8b9ff8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
$gExpression* p_capture_variable : 0x7f019fbebb08
$gExpression* p_source_closure_variable : 0
$gExpression* p_closure_variable : 0x7f019fbebb70
bool p_capture_by_reference : 0
bool p_implicit : 1
bool p_pack_expansion : 0
```

pointer:0x7f019fbebb08 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 41:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019f12c1b0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b9bd8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b9c30 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 : 0x7f019f8b99c8 SgVariableSymbol\* p\_symbol: 0x32e8410 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbebb70 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 60:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double \*

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019f12c1b0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8b9ef0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8b9f48 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 : 0x7f019f8b9c88 SgVariableSymbol\* p\_symbol: 0x32e8530 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

```
Click here to go to the parent node
SgNode* p_parent : 0x7f019ebd7010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8b5770
Sg_File_Info* p_endOfConstruct : 0x7f019f8b57c8
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: 1
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p_definingDeclaration: 0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f019f9b3550
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name : __anonymous_0x306f950
SgClassDeclaration::class_types p_class_type: 0
SgClassType* p_type: 0x7f019f974090
SgClassDefinition* p_definition: 0
SgScopeStatement* p_scope : 0x7f01a182f120
SgDeclarationStatement::template_specialization_enum p_specialization: 1
bool p_from_template: 0
bool p_fixupScope: 0
bool p_isUnNamed: 1
bool p_explicit_annotation_interface: 0
bool p_explicit_interface: 0
bool p_explicit_enum: 0
bool p_explicit_anonymous: 0
SgExprListExp* p_decoratorList: 0
int p_name_qualification_length: 0
bool p type elaboration required: 0
bool p_global_qualification_required: 0
bool p_isAutonomousDeclaration: 1
bool p isRepresentingTemplateParameterInTemplateDeclaration: 0
```

pointer:0x7f019f9b3550 SgClassDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 51:17

Declaration mangled name: class\_\_\_anonymous\_0x306f950

```
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L15R__L16R
   Click here to go to the parent node
SqNode* p parent: 0x7f019ebd7010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bcc50
Sg_File_Info* p_endOfConstruct : 0x7f019f8ba0a8
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: 0x7f019eea93f0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f019eea9010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name : operator()
SgFunctionParameterList* p_parameterList : 0x7f01a0823890
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 : 0x7f019f08e0b0
SgFunctionDefinition* p_definition: 0x7f019f22f140
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f019f8df140
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
SgCtorInitializerList* p_CtorInitializerList: 0x7f019ed87260
SgClassDeclaration* p_associatedClassDeclaration: 0x7f019f9b3a90
```

pointer:0x7f019eea93f0

SgMemberFunctionDeclaration

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 51:20

pointer:0x7f01a0823890 SgFunctionParameterList /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 51:20 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L16R

#### Click here to go to the parent node

SgInitializedNamePtrList p\_args : [0x7f01a03b2a28]

```
SgNode* p_parent : 0x7f019eea93f0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8ba680
Sg_File_Info* p_endOfConstruct : 0x7f019f8ba6d8
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 : 0x7f01a0823890
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
```

```
pointer:0x7f01a03b2a28
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 51:25
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent : 0x7f01a0823890
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8ba3c0
Sg_File_Info* p_endOfConstruct : 0x7f019f8ba418
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 : 0x7f01a137b010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019eea93f0
SgStorageModifier* p_storageModifier : 0x3253d68
SgScopeStatement* p_scope : 0x7f019f22f140
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:0x7f019f22f140
SgFunctionDefinition
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 52:4
IsTransformation:0
IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019eea93f0
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8ba470
Sg_File_Info* p_endOfConstruct : 0x7f019f8ba4c8
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: 0x7f01a17e5310
SgTypeTable* p_type_table: 0x25fe000
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7f019fd54470
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7f019fd54470 SgBasicBlock /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 52:4 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent: 0x7f019f22f140
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8ba310
Sg_File_Info* p_endOfConstruct : 0x7f019f8ba368
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: 0x7f01a17e51e0
SgTypeTable* p_type_table: 0x25fdfd8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f019fb85370, 0x7f019fb853d0, 0x7f019fb85430, 0x7f019fb85490]
std::string p_asm_function_body :
```

pointer:0x7f019fb85370 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 57:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54470

bool p\_isModified : 0

bool p\_containsTransformation: 0

AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr : 0x305a170

AstAttributeMechanism\* p\_attributeMechanism: 0

bool p\_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp\* p\_numeric\_label : 0 int p\_source\_sequence\_value : -1

SgExpression\* p\_expression: 0x7f019ecb3010

pointer:0x7f019ecb3010 SgPlusAssignOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 57:13 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019fb85370
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bafc8
Sg_File_Info* p_endOfConstruct : 0x7f019f8bb020
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 : 0x7f019f8bad60
SgExpression* p_lhs_operand_i : 0x7f019ecea010
SgExpression* p_rhs_operand_i : 0x7f019ed21080
SgType* p_expression_type : 0
```

pointer:0x7f019ecea010 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 57:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019ecb3010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8baba8
Sg_File_Info* p_endOfConstruct : 0x7f019f8bac00
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: 0x7f019f8ba940
SgExpression* p_lhs_operand_i: 0x7f019ed21010
SgExpression* p_rhs_operand_i : 0x7f019fbebc40
SgType* p_expression_type : 0
```

pointer:0x7f019ed21010 SgArrowExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double \*

```
SgNode* p_parent : 0x7f019ecea010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8ba998
Sg_File_Info* p_endOfConstruct : 0x7f019f8ba9f0
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: 0x7f019f8ba730
SgExpression* p_lhs_operand_i : 0x7f019ed58010
SgExpression* p_rhs_operand_i : 0x7f019fbebbd8
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019ed58010 SgThisExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class \*

```
SgNode* p_parent: 0x7f019ed21010
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f019f8ba788
Sg_File_Info* p_endOfConstruct: 0x7f019f8ba7e0
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: 0x7f019f8ba520
SgClassSymbol* p_class_symbol: 0x33008b0
int p_pobj_this: 0
```

pointer:0x7f019fbebbd8 SgVarRefExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double \*

### Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019ed21010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8ba890 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8ba8e8 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 : 0x7f019f8ba578 SgVariableSymbol\* p\_symbol: 0x32e8470 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbebc40 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 57:10 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019ecea010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8baaa0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8baaf8 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: 0x7f019f8ba838 SgVariableSymbol\* p\_symbol: 0x32e8560 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019ed21080 SgArrowExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double

## Click here to go to the parent node

SgNode\* p\_parent: 0x7f019ecb3010

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8baec0
Sg_File_Info* p_endOfConstruct : 0x7f019f8baf18
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: 0x7f019f8bac58
SgExpression* p_lhs_operand_i : 0x7f019ed58070
SgExpression* p_rhs_operand_i : 0x7f019fbebca8
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019ed58070 SgThisExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class \*

int p\_pobj\_this: 0

pointer:0x7f019fbebca8 SgVarRefExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double

### Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019ed21080 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8badb8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bae10 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 : 0x7f019f8bab50 SgVariableSymbol\* p\_symbol: 0x32e84a0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fb853d0 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 58:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54470

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: 0x7f019ec7c010

pointer:0x7f019ec7c010 SgMinusAssignOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 58:13 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019fb853d0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bb9c0
Sg_File_Info* p_endOfConstruct : 0x7f019f8bba18
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: 0x7f019f8bb758
SgExpression* p_lhs_operand_i : 0x7f019ecea080
SgExpression* p_rhs_operand_i : 0x7f019ed21160
SgType* p_expression_type : 0
```

pointer:0x7f019ecea080 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 58:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

#### Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

SgNode\* p\_parent : 0x7f019ec7c010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bb5a0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bb5f8 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: 0x7f019f8bb338 SgExpression\* p\_lhs\_operand\_i : 0x7f019ed210f0 SgExpression\* p\_rhs\_operand\_i : 0x7f019fbebd78 SgType\* p\_expression\_type : 0

pointer:0x7f019ed210f0 SgArrowExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double \*

```
SgNode* p_parent : 0x7f019ecea080
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bb390
Sg_File_Info* p_endOfConstruct : 0x7f019f8bb3e8
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: 0x7f019f8bb128
SgExpression* p_lhs_operand_i : 0x7f019ed580d0
SgExpression* p_rhs_operand_i : 0x7f019fbebd10
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019ed580d0 SgThisExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class \*

```
SgNode* p_parent: 0x7f019ed210f0
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f019f8bb180
Sg_File_Info* p_endOfConstruct: 0x7f019f8bb1d8
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: 0x7f019f8baf70
SgClassSymbol* p_class_symbol: 0x33008b0
int p_pobj_this: 0
```

pointer:0x7f019fbebd10 SgVarRefExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double \*

## Click here to go to the parent node

bool p\_global\_qualification\_required: 0

```
SgNode* p_parent : 0x7f019ed210f0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bb288
Sg_File_Info* p_endOfConstruct : 0x7f019f8bb2e0
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 : 0x7f019f8bae68
SgVariableSymbol* p_symbol: 0x32e84d0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length: 0
bool p_type_elaboration_required: 0
```

pointer:0x7f019fbebd78 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 58:10 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019ecea080 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bb498 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bb4f0 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: 0x7f019f8bb230 SgVariableSymbol\* p\_symbol: 0x32e8560 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019ed21160 SgArrowExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double

```
SgNode* p_parent : 0x7f019ec7c010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bb8b8
Sg_File_Info* p_endOfConstruct : 0x7f019f8bb910
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 : 0x7f019f8bb650
SgExpression* p_lhs_operand_i : 0x7f019ed58130
SgExpression* p_rhs_operand_i : 0x7f019fbebde0
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019ed58130 SgThisExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class \*

```
SgNode* p_parent: 0x7f019ed21160
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f019f8bb6a8
Sg_File_Info* p_endOfConstruct: 0x7f019f8bb700
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: 0x7f019f8bb440
SgClassSymbol* p_class_symbol: 0x33008b0
int p_pobj_this: 0
```

pointer:0x7f019fbebde0 SgVarRefExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019ed21160 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bb7b0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bb808 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 : 0x7f019f8bb548 SgVariableSymbol\* p\_symbol: 0x32e84a0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fb85430 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 59:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54470

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: 0x7f019ec45010

pointer:0x7f019ec45010 SgMultAssignOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 59:13 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fb85430 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bc3b8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bc410 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 : 0x7f019f8bc150 SgExpression\* p\_lhs\_operand\_i : 0x7f019ecea0f0 SgExpression\* p\_rhs\_operand\_i : 0x7f019ed21240 SgType\* p\_expression\_type : 0 SgExpression\* p\_originalExpressionTree : 0

pointer:0x7f019ecea0f0 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 59:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

#### Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019ec45010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bbf98
Sg_File_Info* p_endOfConstruct : 0x7f019f8bbff0
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 : 0x7f019f8bbd30
SgExpression* p_lhs_operand_i: 0x7f019ed211d0
SgExpression* p_rhs_operand_i : 0x7f019fbebeb0
SgType* p_expression_type : 0
```

pointer:0x7f019ed211d0 SgArrowExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double \*

### Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019ecea0f0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bbd88
Sg_File_Info* p_endOfConstruct : 0x7f019f8bbde0
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 : 0x7f019f8bbb20
SgExpression* p_lhs_operand_i : 0x7f019ed58190
SgExpression* p_rhs_operand_i : 0x7f019fbebe48
SgType* p_expression_type : 0
```

pointer:0x7f019ed58190 SgThisExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class \*

int p\_pobj\_this : 0

pointer:0x7f019fbebe48 SgVarRefExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double \*

## Click here to go to the parent node

bool p\_global\_qualification\_required: 0

```
SgNode* p_parent: 0x7f019ed211d0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bbc80
Sg_File_Info* p_endOfConstruct : 0x7f019f8bbcd8
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 : 0x7f019f8bb860
SgVariableSymbol* p_symbol: 0x32e8500
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length: 0
bool p_type_elaboration_required: 0
```

pointer:0x7f019fbebeb0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 59:10 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019ecea0f0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bbe90 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bbee8 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 : 0x7f019f8bbc28 SgVariableSymbol\* p\_symbol: 0x32e8560 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019ed21240 SgArrowExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double

### Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent: 0x7f019ec45010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bc2b0
Sg_File_Info* p_endOfConstruct : 0x7f019f8bc308
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 : 0x7f019f8bc048
SgExpression* p_lhs_operand_i : 0x7f019ed581f0
SgExpression* p_rhs_operand_i : 0x7f019fbebf18
SgType* p_expression_type : 0
```

pointer:0x7f019ed581f0 SgThisExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class \*

int p\_pobj\_this : 0

pointer:0x7f019fbebf18 SgVarRefExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double

### Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019ed21240 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bc1a8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bc200 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 : 0x7f019f8bbf40 SgVariableSymbol\* p\_symbol: 0x32e84a0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fb85490 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 60:7 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54470

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: 0x7f019ec0e010

pointer:0x7f019ec0e010 SgDivAssignOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 60:13 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

### Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

SgNode\* p\_parent : 0x7f019fb85490 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bcdb0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bce08 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 : 0x7f019f8bcb48 SgExpression\* p\_lhs\_operand\_i : 0x7f019ecea160 SgExpression\* p\_rhs\_operand\_i : 0x7f019ed21320 SgType\* p\_expression\_type : 0

pointer:0x7f019ecea160 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 60:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: double

#### Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

SgNode\* p\_parent : 0x7f019ec0e010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bc990 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bc9e8 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: 0x7f019f8bc728 SgExpression\* p\_lhs\_operand\_i: 0x7f019ed212b0 SgExpression\* p\_rhs\_operand\_i : 0x7f019fbebfe8 SgType\* p\_expression\_type : 0

pointer:0x7f019ed212b0 SgArrowExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double \*

```
SgNode* p_parent : 0x7f019ecea160
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bc780
Sg_File_Info* p_endOfConstruct : 0x7f019f8bc7d8
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 : 0x7f019f8bc518
SgExpression* p_lhs_operand_i : 0x7f019ed58250
SgExpression* p_rhs_operand_i : 0x7f019fbebf80
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019ed58250 SgThisExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class \*

int p\_pobj\_this : 0

pointer:0x7f019fbebf80 SgVarRefExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double \*

## Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019ed212b0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bc678 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bc6d0 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 : 0x7f019f8bc258 SgVariableSymbol\* p\_symbol: 0x32e8530 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbebfe8 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 60:10 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

### Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019ecea160 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bc888 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bc8e0 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 : 0x7f019f8bc620 SgVariableSymbol\* p\_symbol: 0x32e8560 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019ed21320 SgArrowExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double

```
SgNode* p_parent : 0x7f019ec0e010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bcca8
Sg_File_Info* p_endOfConstruct : 0x7f019f8bcd00
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: 0x7f019f8bca40
SgExpression* p_lhs_operand_i : 0x7f019ed582b0
SgExpression* p_rhs_operand_i : 0x7f019fbec050
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019ed582b0 SgThisExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class \*

int p\_pobj\_this : 0

pointer:0x7f019fbec050 SgVarRefExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: double

### Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019ed21320 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bcba0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bcbf8 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 : 0x7f019f8bc938 SgVariableSymbol\* p\_symbol: 0x32e84a0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

```
IsTransformation:0
IsOutputInCodeGeneration:1
Declaration mangled name: L8R_constructor_initialization_list_
  Click here to go to the parent node
SgNode* p_parent : 0x7f019eea93f0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8ba5d0
Sg_File_Info* p_endOfConstruct : 0x7f019f8ba628
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
```

pointer:0x7f019ed87260 SgCtorInitializerList NULL FILE 0:0

bool p\_nameOnly: 0
bool p\_forward: 0
bool p\_externBrace: 0
bool p\_skipElaborateType: 0

std::string p\_binding\_label :

SgInitializedNamePtrList p\_ctors : []

SgDeclarationStatement\* p\_definingDeclaration: 0x7f019ed87260

SgQualifiedNamePtrList p\_qualifiedNameList : []

SgDeclarationStatement\* p\_firstNondefiningDeclaration: 0x7f019ed87260

pointer:0x7f019fb854f0 SgExprStatement /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 64:4 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54358

bool p\_isModified : 0

bool p\_containsTransformation: 0

AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr : 0x3061110

AstAttributeMechanism\* p\_attributeMechanism: 0

bool p\_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp\* p\_numeric\_label : 0 int p\_source\_sequence\_value : -1

SgExpression\* p\_expression: 0x7f019fbb40f0

pointer:0x7f019fbb40f0 SgFunctionCallExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 64:40 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: void

Click here to go to the parent node

bool p\_uses\_operator\_syntax: 0

SgNode\* p\_parent: 0x7f019fb854f0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bd6a0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bd6f8 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: 0x7f019f8bd438 SgExpression\* p\_function: 0x7f019eba0010 SgExprListExp\* p\_args : 0x7f019fc1e148 SgType\* p\_expression\_type : 0x7f01a127b590

```
Click here to go to the parent node
SgNode* p_parent : 0x7f019fbb40f0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bd178
Sg_File_Info* p_endOfConstruct : 0x7f019f8bd1d0
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 : 0x7f019f8ba050
SqFunctionSymbol* p_symbol_i : 0x317f5d0
SgFunctionType* p_function_type: 0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length: 0
bool p_type_elaboration_required: 0
```

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 64:4

Expression type: void(::RAJA::Index\_type, ::RAJA::Index\_type, class )

pointer:0x7f019eba0010 SgFunctionRefExp

IsOutputInCodeGeneration:0

bool p\_global\_qualification\_required: 0

IsTransformation:0

pointer:0x7f019fc1e148 SgExprListExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

```
SgNode* p_parent: 0x7f019fbb40f0
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xfffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f019f8bd598
Sg_File_Info* p_endOfConstruct: 0x7f019f8bd5f0
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: 0x7f019f8bd330
SgExpressionPtrList p_expressions: [0x7f019fbec0b8, 0x7f019fbec120, 0x7f019fbec188]
```

pointer:0x7f019fbec0b8 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 64:41 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

# Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019fc1e148 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bd280 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bd2d8 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 : 0x7f019f8bd0c8 SgVariableSymbol\* p\_symbol: 0x32e82f0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbec120 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 64:48 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

# Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fc1e148

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bd388 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bd3e0 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 : 0x7f019f8bd120 SgVariableSymbol\* p\_symbol: 0x32e8320 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019fbec188 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 64:53 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type:

Click here to go to the parent node

bool p\_global\_qualification\_required: 0

```
SgNode* p_parent : 0x7f019fc1e148
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bd490
Sg_File_Info* p_endOfConstruct : 0x7f019f8bd4e8
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: 0x7f019f8bd228
SgVariableSymbol* p_symbol: 0x32e8440
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length: 0
bool p_type_elaboration_required: 0
```

```
SgTemplateInstantiationFunctionDecl
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L17R
   Click here to go to the parent node
SgNode* p_parent: 0x7f01a182f120
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bd858
Sg_File_Info* p_endOfConstruct : 0x7f019f8bd800
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: 0
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p definingDeclaration: 0x7f019f2c4850
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f019f2c4430
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name : forall < >
SgFunctionParameterList* p_parameterList : 0x7f01a0823d30
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: 0x7f01a127b6b0
SgFunctionDefinition* p_definition: 0x7f019f22f270
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f01a01fe010
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
SgName p_templateName : forall
SgTemplateFunctionDeclaration* p_templateDeclaration: 0x7f019fddd870
SgTemplateArgumentPtrList p_templateArguments : [0x7f019ffe9218]
bool p nameResetFromMangledForm: 1
```

pointer:0x7f019f2c4850

pointer:0x7f01a0823d30 SgFunctionParameterList compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L18R

Click here to go to the parent node

```
SgNode* p_parent: 0x7f019f2c4850
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8be0f0
Sg_File_Info* p_endOfConstruct : 0x7f019f8be148
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: 0x7f01a0823d30
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
```

SglnitializedNamePtrList p\_args: [0x7f01a03b3090, 0x7f01a03b31d8, 0x7f01a03b3320, 0x7f01a03b3468]

pointer:0x7f01a03b3090 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p parent: 0x7f01a0823d30
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8bdcd0
Sg_File_Info* p_endOfConstruct : 0x7f019f8bdd28
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SaName p name:
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f019f974010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4850
SgStorageModifier* p_storageModifier : 0x3253e30
SgScopeStatement* p_scope : 0x7f019f22f270
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:0x7f01a03b31d8 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p parent: 0x7f01a0823d30
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8bdd80
Sg_File_Info* p_endOfConstruct : 0x7f019f8bddd8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: begin
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4850
SgStorageModifier* p_storageModifier : 0x3253e58
SgScopeStatement* p_scope : 0x7f019f22f270
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:0x7f01a03b3320 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p parent: 0x7f01a0823d30
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8bde30
Sg_File_Info* p_endOfConstruct : 0x7f019f8bde88
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: end
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4850
SgStorageModifier* p_storageModifier : 0x3253e80
SgScopeStatement* p_scope : 0x7f019f22f270
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:0x7f01a03b3468 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p parent: 0x7f01a0823d30
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8bdee0
Sg_File_Info* p_endOfConstruct : 0x7f019f8bdf38
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: loop body
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f019f974090
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4850
SgStorageModifier* p_storageModifier : 0x3253ea8
SgScopeStatement* p_scope : 0x7f019f22f270
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:0x7f019f22f270 SgFunctionDefinition compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019f2c4850
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bdf90
Sg_File_Info* p_endOfConstruct : 0x7f019f8bdfe8
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: 0x7f01a17e5570
SgTypeTable* p_type_table: 0x25fe050
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7f019fd54588
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7f019fd54588 SgBasicBlock compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f22f270

```
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct : 0x7f019f8bdc20
Sg_File_Info* p_endOfConstruct : 0x7f019f8bdc78
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: 0x7f01a17e5440
SgTypeTable* p_type_table: 0x25fe028
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f019fb85550, 0x7f019ea62010, 0x7f019f7fb138, 0x7f019fb85670]
std::string p_asm_function_body :
```

pointer:0x7f019fb85550 SgExprStatement compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54588

bool p\_isModified : 0

bool p\_containsTransformation: 0

AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism\* p\_attributeMechanism: 0

 ${\color{red}\textbf{bool}}\ p\_contains Transformation To Surrounding White space: \textbf{0}$ 

SgLabelRefExp\* p\_numeric\_label : 0 int p\_source\_sequence\_value : -1

SgExpression\* p\_expression: 0x7f019f88c0b0

pointer:0x7f019f88c0b0 SgNullExpression compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1

Expression type: int

## Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fb85550
bool p\_isModified : 0
bool p\_containsTransformation : 0
\$CLASSNAME\* p\_freepointer : 0xffffffffffffff
Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8be1f8
Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8be250
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 : 0x7f019f8be040

pointer:0x7f019ea62010
SgPragmaDeclaration
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: pragma\_statement

Click here to go to the parent node

SgPragma\* p\_pragma: 0x7f019eb7c010

```
SgNode* p_parent : 0x7f019fd54588
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8be408
Sg_File_Info* p_endOfConstruct : 0x7f019f8be460
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: 0x7f019ea62010
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f019ea62010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
```

## pointer:0x7f019eb7c010 SgPragma

## Click here to go to the parent node

SgNode\* p\_parent : 0x7f019ea62010

bool p\_isModified : 0

bool p\_containsTransformation : 0

\$CLASSNAME\* p\_freepointer : 0xfffffffffffff

std::string p\_name : novector

Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8be098 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8be1a0 short p\_printed : 0

AstAttributeMechanism\* p\_attributeMechanism: 0

pointer:0x7f019f7fb138 SgForStatement compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019fd54588
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8bf6f0
Sg_File_Info* p_endOfConstruct : 0x7f019f8bf748
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: 0x7f01a17e56a0
SgTypeTable* p_type_table: 0x25fe078
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 : 0x7f019f7c40f0
SgStatement* p_test: 0x7f019fb855b0
SgExpression* p_increment : 0x7f019f4c8078
SgStatement* p loop body: 0x7f019fd546a0
SgStatement* p_else_body: 0
std::string p_string_label:
```

pointer:0x7f019f7c40f0 SgForInitStatement compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent: 0x7f019f7fb138

bool p\_isModified : 0

bool p\_containsTransformation : 0

Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8be930 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 : [0x7f019f684c40]

```
SgSS2
Declaration mangled name: _variable_declaration__variable_type_L5R_variable_name_L17R__scope_
                                                                                                                          SgSS3
                                                                                                                scope
  Click here to go to the parent node
SqNode* p parent: 0x7f019f7c40f0
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8be618
Sg_File_Info* p_endOfConstruct : 0x7f019f8be670
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: 0x7f019f684c40
SgQualifiedNamePtrList p qualifiedNameList : []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables: [0x7f01a03b35b0]
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
```

pointer:0x7f019f684c40 SgVariableDeclaration compilerGenerated 0:0 IsTransformation:0

IsOutputInCodeGeneration:0

bool p\_isAssociatedWithDeclarationList: 0 bool p\_isFirstDeclarationOfDeclarationList: 1

bool p\_is\_thread\_local : 0 bool p\_is\_constexpr : 0

pointer:0x7f01a03b35b0 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SqNode* p parent: 0x7f019f684c40
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8be5c0
Sg_File_Info* p_endOfConstruct : 0x7f019f8be568
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SaName p name : ii
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0x7f019f5320e0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f566928
SgStorageModifier* p_storageModifier : 0x3253ed0
SgScopeStatement* p_scope : 0x7f019f7fb138
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:0x7f019f5320e0 SgAssignInitializer compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: ::RAJA::Index\_type

.

Click here to go to the parent node

SgNode\* p\_parent : 0x7f01a03b35b0 bool p\_isModified : 0 bool p\_containsTransformation : 0

Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8be828 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8be7d0

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 : 0x7f019f8be510

bool p\_is\_explicit\_cast : 1
bool p\_is\_braced\_initialized : 0

SgExpression\* p\_operand\_i : 0x7f019fbec1f0

SgType\* p\_expression\_type: 0

pointer:0x7f019fbec1f0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:29 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type Click here to go to the parent node

bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f5320e0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8be720 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8be778 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 : 0x7f019f8be4b8 SgVariableSymbol\* p\_symbol : 0x32e85c0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0

pointer:0x7f019fb855b0 SgExprStatement compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

## Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f7fb138

bool p\_isModified : 0

bool p\_containsTransformation: 0

AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism\* p\_attributeMechanism: 0

 ${\color{red}\textbf{bool}}\ p\_contains Transformation To Surrounding White space: \textbf{0}$ 

SgLabelRefExp\* p\_numeric\_label : 0 int p\_source\_sequence\_value : -1

SgExpression\* p\_expression: 0x7f019f4fb080

pointer:0x7f019f4fb080 SgLessThanOp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:39 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: bool

Click here to go to the parent node

SgExpression\* p\_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f019fb855b0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bebf0
Sg_File_Info* p_endOfConstruct : 0x7f019f8bec48
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: 0x7f019f8be988
SgExpression* p_lhs_operand_i: 0x7f019fbec258
SgExpression* p_rhs_operand_i : 0x7f019fbec2c0
SgType* p_expression_type : 0
```

pointer:0x7f019fbec258 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:36 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

### Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019f4fb080 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8be9e0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bea38 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 : 0x7f019f8be880 SgVariableSymbol\* p\_symbol: 0x32e8650 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fbec2c0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:41 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

# Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f4fb080

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8beae8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8beb40 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 : 0x7f019f8be6c8 SgVariableSymbol\* p\_symbol: 0x32e85f0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019f4c8078
SgPlusPlusOp
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:46
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: ::RAJA::Index\_type

Click here to go to the parent node

SgNode\* p\_parent: 0x7f019f7fb138
bool p\_isModified: 0
bool p\_containsTransformation: 0
\$CLASSNAME\* p\_freepointer: 0xfffffffffffffff
Sg\_File\_Info\* p\_startOfConstruct: 0x7f019f8beeb0
Sg\_File\_Info\* p\_endOfConstruct: 0x7f019f8bef08
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: 0x7f019f8bea90
SgExpression\* p\_operand\_i: 0x7f019fbec328
SgType\* p\_expression\_type: 0

SgUnaryOp::Sgop\_mode p\_mode: 0

pointer:0x7f019fbec328
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 28:49
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: ::RAJA::Index\_type

### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019f4c8078 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8beda8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bee00 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: 0x7f019f8beb98 SgVariableSymbol\* p\_symbol: 0x32e8650 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019fd546a0 SgBasicBlock compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent: 0x7f019f7fb138
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bef60
Sg_File_Info* p_endOfConstruct : 0x7f019f8befb8
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: 0x7f01a17e57d0
SgTypeTable* p_type_table: 0x25fe0a0
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f019fb85610]
std::string p_asm_function_body :
```

pointer:0x7f019fb85610 SgExprStatement compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd546a0

bool p\_isModified : 0

bool p\_containsTransformation: 0

AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism\* p\_attributeMechanism: 0

 ${\color{red}\textbf{bool}}\ p\_contains Transformation To Surrounding White space: \textbf{0}$ 

SgLabelRefExp\* p\_numeric\_label : 0 int p\_source\_sequence\_value : -1

SgExpression\* p\_expression: 0x7f019fbb4160

pointer:0x7f019fbb4160 SgFunctionCallExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 29:19 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: void

## Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fb85610

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bf590 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bf5e8 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 : 0x7f019f8bf328 SgExpression\* p\_function: 0x7f019e9f0010 SgExprListExp\* p\_args : 0x7f019fc1e1b0 SgType\* p\_expression\_type : 0x7f019f08e0b0 bool p\_uses\_operator\_syntax: 1

pointer:0x7f019e9f0010 SgDotExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: void(int)

```
SgNode* p_parent : 0x7f019fbb4160
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bf488
Sg_File_Info* p_endOfConstruct : 0x7f019f8bf4e0
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: 0x7f019f8bf220
SgExpression* p_lhs_operand_i : 0x7f019fbec390
SgExpression* p_rhs_operand_i : 0x7f019ea27010
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0
```

pointer:0x7f019fbec390 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 29:9 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: class

#### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019e9f0010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bf170 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bf1c8 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 : 0x7f019f8bf010 SgVariableSymbol\* p\_symbol: 0x32e8620 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019ea27010 SgMemberFunctionRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 29:19 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: void(int)

# Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent : 0x7f019e9f0010 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bf068 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bf0c0 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 : 0x7f019f8bee58 SqMemberFunctionSymbol\* p\_symbol\_i : 0x331f3c0 int p\_virtual\_call: 0 SgFunctionType\* p\_function\_type: 0 int p\_need\_qualifier: 0 int p\_name\_qualification\_length: 0 bool p type elaboration required: 0

pointer:0x7f019fc1e1b0 SgExprListExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent : 0x7f019fbb4160
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
$g_File_Info* p_startOfConstruct : 0x7f019f8bf380
$g_File_Info* p_endOfConstruct : 0x7f019f8bf3d8
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
$g_File_Info* p_operatorPosition : 0x7f019f8bed50
```

SgExpressionPtrList p\_expressions : [0x7f019fbec3f8]

pointer:0x7f019fbec3f8
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 29:21
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: ::RAJA::Index\_type

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fc1e1b0

bool p\_global\_qualification\_required: 0

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bf278 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bf2d0 AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism\* p\_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p\_need\_paren: 1 bool p\_lvalue: 0 bool p\_global\_qualified\_name: 0 Sg\_File\_Info\* p\_operatorPosition : 0x7f019f8bf118 SgVariableSymbol\* p\_symbol: 0x32e8650 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0

pointer:0x7f019fb85670 SgExprStatement compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd54588

bool p\_isModified : 0

bool p\_containsTransformation: 0

AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism\* p\_attributeMechanism: 0

 ${\color{red}\textbf{bool}}\ p\_contains Transformation To Surrounding White space: \textbf{0}$ 

SgLabelRefExp\* p\_numeric\_label : 0 int p\_source\_sequence\_value : -1

SgExpression\* p\_expression: 0x7f019f88c100

pointer:0x7f019f88c100 SgNullExpression compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

bool p\_global\_qualified\_name: 0

Sg\_File\_Info\* p\_operatorPosition: 0x7f019f8bf430

SgNode\* p\_parent : 0x7f019fb85670
bool p\_isModified : 0
bool p\_containsTransformation : 0
\$CLASSNAME\* p\_freepointer : 0xfffffffffffff
Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8bf7f8
Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bf850
AttachedPreprocessingInfoType\* p\_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism\* p\_attributeMechanism : 0
bool p\_containsTransformationToSurroundingWhitespace : 0
bool p\_lvalue : 0

```
SgTemplateInstantiationFunctionDecl
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L13R
  Click here to go to the parent node
SgNode* p_parent: 0x7f01a182f120
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bf7a0
Sg_File_Info* p_endOfConstruct : 0x7f019f8bf538
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: 0
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p definingDeclaration: 0x7f019f2c4c70
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f019f2c4010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name : forall < seq_exec , >
SgFunctionParameterList* p_parameterList: 0x7f01a0823f80
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: 0x7f01a127b590
SgFunctionDefinition* p_definition: 0x7f019f22f3a0
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f01a01fe010
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
SgName p_templateName : forall
SgTemplateFunctionDeclaration* p_templateDeclaration: 0x7f019fddd010
SgTemplateArgumentPtrList p_templateArguments: [0x7f019ffe9148, 0x7f019ffe91b0]
bool p nameResetFromMangledForm: 1
```

pointer:0x7f019f2c4c70

pointer:0x7f01a0823f80 SgFunctionParameterList compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L14R

Click here to go to the parent node

```
SgNode* p_parent : 0x7f019f2c4c70
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bfd78
Sg_File_Info* p_endOfConstruct : 0x7f019f8bfdd0
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: 0x7f01a0823f80
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
```

SgInitializedNamePtrList p\_args: [0x7f01a03b36f8, 0x7f01a03b3840, 0x7f01a03b3988]

pointer:0x7f01a03b36f8 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SqNode* p parent : 0x7f01a0823f80
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8bfa08
Sg_File_Info* p_endOfConstruct : 0x7f019f8bfa60
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: begin
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4c70
SgStorageModifier* p_storageModifier: 0x3253ef8
SgScopeStatement* p_scope : 0x7f019f22f3a0
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:0x7f01a03b3840 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SqNode* p parent : 0x7f01a0823f80
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8bfab8
Sg_File_Info* p_endOfConstruct : 0x7f019f8bfb10
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: end
std::string p_microsoft_uuid_string:
SgType* p_typeptr: 0x7f01a1514550
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4c70
SgStorageModifier* p_storageModifier: 0x3253f20
SgScopeStatement* p_scope : 0x7f019f22f3a0
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:0x7f01a03b3988 SgInitializedName compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SqNode* p parent : 0x7f01a0823f80
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f019f8bfb68
Sg_File_Info* p_endOfConstruct : 0x7f019f8bfbc0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: loop body
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f019f974090
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f019f2c4c70
SgStorageModifier* p_storageModifier: 0x3253f48
SgScopeStatement* p_scope : 0x7f019f22f3a0
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:0x7f019f22f3a0 SgFunctionDefinition compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019f2c4c70
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bfc18
Sg_File_Info* p_endOfConstruct : 0x7f019f8bfc70
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: 0x7f01a17e5a30
SgTypeTable* p_type_table : 0x25fe0f0
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7f019fd547b8
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7f019fd547b8 SgBasicBlock compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f019f22f3a0
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bf958
Sg_File_Info* p_endOfConstruct : 0x7f019f8bf9b0
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: 0x7f01a17e5900
SgTypeTable* p_type_table : 0x25fe0c8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f019fb856d0]
std::string p_asm_function_body :
```

pointer:0x7f019fb856d0 SgExprStatement compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fd547b8

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: 0x7f019fbb41d0

pointer:0x7f019fbb41d0 SgFunctionCallExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:14 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: void

### Click here to go to the parent node

SgNode\* p\_parent : 0x7f019fb856d0 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8c05b8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8c0610 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 : 0x7f019f8c0350 SgExpression\* p\_function: 0x7f019eba0080 SgExprListExp\* p\_args : 0x7f019fc1e280 SgType\* p\_expression\_type : 0x7f01a127b6b0 bool p\_uses\_operator\_syntax: 0

```
Click here to go to the parent node
SgNode* p_parent : 0x7f019fbb41d0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f019f8bfe80
Sg_File_Info* p_endOfConstruct : 0x7f019f8bfed8
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 : 0x7f019f8bfcc8
SqFunctionSymbol* p_symbol_i : 0x317f630
SgFunctionType* p_function_type: 0
SgExpression* p_originalExpressionTree : 0
```

Expression type: void(struct ::RAJA::seq\_exec, ::RAJA::Index\_type, ::RAJA::Index\_type, class)

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:7

pointer:0x7f019eba0080 SgFunctionRefExp

IsOutputInCodeGeneration:0

int p\_name\_qualification\_length : 0
bool p\_type\_elaboration\_required : 0
bool p\_global\_qualification\_required : 0

IsTransformation:0

pointer:0x7f019fc1e280 SgExprListExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent : 0x7f019fbb41d0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f019f8c04b0
Sg_File_Info* p_endOfConstruct : 0x7f019f8c0508
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 : 0x7f019f8c0248
```

SgExpressionPtrList p\_expressions: [0x7f019fc51090, 0x7f019fbec460, 0x7f019fbec4c8, 0x7f019fbec530]

Click here to go to the parent node SgNode\* p\_parent: 0x7f019fc1e280 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8c0038 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8bff88 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: 0x7f019f8c00e8 bool p\_is\_explicit\_cast: 1 bool p\_is\_braced\_initialized: 0 SgMemberFunctionDeclaration\* p\_declaration: 0 SgExprListExp\* p\_args: 0x7f019fc1e218 SgType\* p\_expression\_type: 0x7f019f974010 bool p need name: 1 bool p\_need\_qualifier: 0 bool p\_need\_parenthesis\_after\_name: 1

/home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:16

pointer:0x7f019fc51090 SgConstructorInitializer

IsOutputInCodeGeneration:0

Expression type: struct ::RAJA::seq\_exec

bool p\_associated\_class\_unknown : 0
int p\_name\_qualification\_length : 0
bool p\_type\_elaboration\_required : 0
bool p\_global\_qualification\_required : 0

IsTransformation:0

pointer:0x7f019fc1e218 SgExprListExp compilerGenerated 0:0 IsTransformation:0 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

SgExpressionPtrList p\_expressions : []

```
SgNode* p_parent: 0x7f019fc51090
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xfffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f019f8bff30
Sg_File_Info* p_endOfConstruct: 0x7f019f8bfe28
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: 0x7f019f8bffe0
```

pointer:0x7f019fbec460 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:33 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

## Click here to go to the parent node

SgNode\* p\_parent: 0x7f019fc1e280

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8c0198 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8c01f0 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 : 0x7f019f8c0090 SgVariableSymbol\* p\_symbol: 0x32e8680 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019fbec4c8 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:40 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: ::RAJA::Index\_type

## Click here to go to the parent node

SgNode\* p\_parent: 0x7f019fc1e280

bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8c02a0 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8c02f8 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 : 0x7f019f8bfd20 SgVariableSymbol\* p\_symbol: 0x32e86b0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0 bool p\_global\_qualification\_required: 0

pointer:0x7f019fbec530 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/indirectLambdaCall.cxx 13:45 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: class

#### Click here to go to the parent node

bool p\_global\_qualification\_required: 0

SgNode\* p\_parent: 0x7f019fc1e280 bool p\_isModified: 0 bool p\_containsTransformation: 0 Sg\_File\_Info\* p\_startOfConstruct : 0x7f019f8c03a8 Sg\_File\_Info\* p\_endOfConstruct : 0x7f019f8c0400 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 : 0x7f019f8c0140 SgVariableSymbol\* p\_symbol : 0x32e86e0 SgExpression\* p\_originalExpressionTree : 0 int p\_name\_qualification\_length: 0 bool p\_type\_elaboration\_required: 0