```
pointer:0x7fc98ebf6010
SgSourceFile
```

root node

```
SgNode* p_parent : 0x147a350
bool p isModified: 0
bool p_containsTransformation: 0
Sq File Info* p startOfConstruct : 0x7fc98eda9068
SgStringList p_originalCommandLineArgumentList : [pdfGenerator, -std=c++11, -c, arrayRefs.cpp]
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:0x7fc98ed24120
SgGlobal
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 0:0
IsTransformation:0
IsOutputInCodeGeneration:0
```

SgNode* p_parent : 0x7fc98ebf6010

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98eda90c0
Sg_File_Info* p_endOfConstruct : 0x7fc98eda9118
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: 0x7fc98ecd9140
SgTypeTable* p_type_table: 0x14b4d98
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>: [0x7fc98ea4b010, 0x7fc98ea4b2b0, 0x7fc98e57c010, 0x7fc98
```

```
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L2R__L3R
  Click here to go to the parent node
SgNode* p_parent: 0x7fc98ed24120
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98d7b5a98
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b5a40
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: 0x7fc98dbc79e0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7fc98dbc7610
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name: foo
SgFunctionParameterList* p_parameterList : 0x7fc98dd17860
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: 0x7fc98e770470
SgFunctionDefinition* p_definition: 0x7fc98d4fd010
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7fc98ed24120
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:0x7fc98dbc79e0 SgFunctionDeclaration

/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 1:1

pointer:0x7fc98dd17860 SgFunctionParameterList /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 1:1 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L3R

Click here to go to the parent node

```
SgNode* p_parent : 0x7fc98dbc79e0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6330
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6388
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: 0x7fc98dd17860
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
```

SgInitializedNamePtrList p_args: [0x7fc98d8a4ac0, 0x7fc98d8a4c08, 0x7fc98d8a4d50, 0x7fc98d8a4e98]

```
pointer:0x7fc98d8a4ac0
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 1:15
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7fc98dd17860
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fc98d7b5f10
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b5f68
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: a
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7fc98d6a4130
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7fc98dbc79e0
SgStorageModifier* p_storageModifier: 0x20fa570
SgScopeStatement* p_scope : 0x7fc98d4fd010
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:0x7fc98d8a4c08
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 1:34
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7fc98dd17860
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fc98d7b5fc0
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6018
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 : 0x7fc98e870010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7fc98dbc79e0
SgStorageModifier* p_storageModifier: 0x20fa598
SgScopeStatement* p_scope : 0x7fc98d4fd010
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:0x7fc98d8a4d50
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 1:41
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7fc98dd17860
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fc98d7b6070
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b60c8
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 : 0x7fc98e870010
SgInitializer* p_initptr : 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7fc98dbc79e0
SgStorageModifier* p_storageModifier : 0x20fa5c0
SgScopeStatement* p_scope : 0x7fc98d4fd010
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:0x7fc98d8a4e98
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 1:49
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SqNode* p parent: 0x7fc98dd17860
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7fc98d7b6120
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6178
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: k
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7fc98e870010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7fc98dbc79e0
SgStorageModifier* p_storageModifier: 0x20fa5e8
SgScopeStatement* p_scope : 0x7fc98d4fd010
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:0x7fc98d4fd010
SgFunctionDefinition
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 2:1
IsTransformation:0
IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7fc98dbc79e0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98d7b61d0
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6228
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: 0x7fc98ecd94d0
SgTypeTable* p_type_table: 0x14b4e10
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7fc98d592010
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7fc98d592010 SgBasicBlock /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 2:1 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7fc98d4fd010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98d7b5e60
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b5eb8
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 : 0x7fc98ecd93a0
SgTypeTable* p_type_table: 0x14b4de8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7fc98d42d010]
std::string p_asm_function_body :
```

pointer:0x7fc98d42d010 SgExprStatement /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:4 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7fc98d592010

bool p_isModified : 0

bool p_containsTransformation: 0

\$CLASSNAME* p_freepointer : 0xfffffffffffff

Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6d28 Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6d80

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: 0x7fc98d45c010

pointer:0x7fc98d45c010 SgAssignOp /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:14 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent : 0x7fc98d42d010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6c78
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6cd0
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 : 0x7fc98d7b6b70
SgExpression* p_lhs_operand_i : 0x7fc98d4930f0
SgExpression* p_rhs_operand_i : 0x7fc98d726148
SgType* p_expression_type : 0
```

pointer:0x7fc98d4930f0 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:11 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent : 0x7fc98d45c010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6a68
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6ac0
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: 0x7fc98d7b63e0
SgExpression* p_lhs_operand_i : 0x7fc98d493080
SgExpression* p_rhs_operand_i : 0x7fc98d4ca148
SgType* p_expression_type : 0
```

pointer:0x7fc98d493080 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int [10]

Click here to go to the parent node

```
SgNode* p_parent : 0x7fc98d4930f0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6858
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b68b0
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 : 0x7fc98d7b66f8
SgExpression* p_lhs_operand_i : 0x7fc98d493010
SgExpression* p_rhs_operand_i : 0x7fc98d4ca0e0
SgType* p_expression_type : 0
```

pointer:0x7fc98d493010 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:4 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int [10][10]

Click here to go to the parent node

```
SgNode* p_parent : 0x7fc98d493080
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6648
Sg_File_Info* p_endOfConstruct : 0x7fc98d7b66a0
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: 0x7fc98d7b64e8
SgExpression* p_lhs_operand_i : 0x7fc98d4ca010
SgExpression* p_rhs_operand_i : 0x7fc98d4ca078
SgType* p_expression_type : 0
```

pointer:0x7fc98d4ca010
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:4
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int [10][10]

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7fc98d493010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6438 Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6490 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: 0x7fc98d7b6280 SgVariableSymbol* p_symbol : 0x2174db0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7fc98d4ca078
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:6
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7fc98d493010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6540 Sg_File_Info* p_endOfConstruct : 0x7fc98d7b6598 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: 0x7fc98d7b62d8 SgVariableSymbol* p_symbol : 0x2174de0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7fc98d4ca0e0
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:9
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7fc98d493080 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6750 Sg_File_Info* p_endOfConstruct : 0x7fc98d7b67a8 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 : 0x7fc98d7b65f0 SgVariableSymbol* p_symbol : 0x2174e10 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7fc98d4ca148 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:12 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7fc98d4930f0 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7fc98d7b6960 Sg_File_Info* p_endOfConstruct : 0x7fc98d7b69b8 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 : 0x7fc98d7b6800 SgVariableSymbol* p_symbol: 0x2174e40 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7fc98d726148 SgIntVal /home/liao6/workspace/github/rose-ast.git/arrayRefs.cpp 3:15 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

std::string p_valueString: 0

```
SgNode* p_parent: 0x7fc98d45c010
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer: 0xffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7fc98d7b6b18
Sg_File_Info* p_endOfConstruct: 0x7fc98d7b6a10
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: 0x7fc98d7b6bc8
SgExpression* p_originalExpressionTree: 0
int p_value: 0
```