

pointer:0x7f3ccf516010
SgSourceFile

root node

SgNode* p_parent : 0xa11650
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cda75c068
SgStringList p_originalCommandLineArgumentList : [./loopNestingInfoProcessing, inputCode_loopNestingInfoProcessing.C]
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 : 0
bool p_Cxx11_gnu_only : 0
bool p_C14_only : 0
bool p_C14_gnu_only : 0
bool p_Cxx14_only : 0
bool p_Cxx14_gnu_only : 0
bool p_Fortran_only : 0
bool p_F77_only : 0
bool p_F90_only : 0
bool p_F95_only : 0
bool p_F2003_only : 0
bool p_F2008_only : 0
bool p_CoArrayFortran_only : 0
bool p_Java_only : 0
bool p_X10_only : 0
bool p_PHP_only : 0
bool p_Python_only : 0
bool p_Cuda_only : 0
bool p_OpenCL_only : 0
bool p_requires_C_preprocessor : 0
bool p_binary_only : 0
SgFile::outputFormatOption_enum p_inputFormat : 2
SgFile::outputFormatOption_enum p_outputFormat : 2
SgFile::outputFormatOption_enum p_backendCompileFormat : 2
bool p_fortran_implicit_none : 0
bool p_openmp : 0
bool p_openmp_parse_only : 1
bool p_openmp_ast_only : 0
bool p_openmp_lowering : 0
bool p_cray_pointer_support : 0
bool p_failsafe : 0
bool p_output_parser_actions : 0
bool p_exit_after_parser : 0
bool p_skip_syntax_check : 0
bool p_relax_syntax_check : 0
bool p_skip_translation_from_edg_ast_to_rose_ast : 0
bool p_skip_transformation : 0
bool p_skip_unparse : 0
bool p_skipfinalCompileStep : 0
bool p_unparse_includes : 0
bool p_unparse_line_directives : 0
bool p_unparse_function_calls_using_operator_syntax : 0
bool p_unparse_function_calls_using_operator_syntax : 0

pointer:0x7f3ccf64c120
SgGlobal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3ccf516010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cda75c0c0
Sg_File_Info* p_endOfConstruct : 0x7f3cda75c118
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe14120
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601140
SgTypeTable* p_type_table : 0xa4c108
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>: [0x7f3ccf07d010, 0x7f3ccf07d3e0, 0x7f3ccf07d7b0, 0x7f3ccf07db0]

AstAttributes:
loopNestingInfo: 0,5

pointer:0x7f3ccf214b40
SgFunctionDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.cpp
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: main_0x7f3ccf214b40

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3ccf64c120
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808238
Sg_File_Info* p_endOfConstruct : 0x7f3cce8081e0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe09a40
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 isFriend() = false)
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7f3ccf214b40
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3ccf214770
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgName p_name : main
SgFunctionParameterList* p_parameterList : 0x7f3ccf4ca4c0
SgFunctionModifier p_functionModifier : <too long>: <too long>: SgFunctionModifier(isUnknown() = false isDefault() = true isInline() = false)
SgSpecialFunctionModifier p_specialFunctionModifier : <too long>: <too long>: SgSpecialFunctionModifier(isUnknown() = false isDefault() = false)
SgTypePtrList p_exceptionSpecification : []
bool p_named_in_end_statement : 0
std::string p_asm_name :
SgExprListExp* p_decoratorList : 0
SgFunctionType* p_type : 0x7f3ccf25c770
SgFunctionDefinition* p_definition : 0x7f3cce6e5010
bool p_oldStyleDefinition : 0
SgScopeStatement* p_scope : 0x7f3ccf64c120
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 : 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

AstAttributes:
loopNestingInfo: 0,5

pointer:0x7f3ccf4ca4c0
SgFunctionParameterList
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.cpp
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L1R

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3ccf214b40
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808550
Sg_File_Info* p_endOfConstruct : 0x7f3cce8085a8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xd60170
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 isFriend() = false)
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3ccf4ca4c0
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgInitializedNamePtrList p_args : []

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce6e5010
SgFunctionDefinition
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.cpp
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3ccf214b40
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce8083f0
Sg_File_Info* p_endOfConstruct : 0x7f3cce808448
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe17910
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf6014d0
SgTypeTable* p_type_table : 0xa4c180
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body : 0x7f3cce77a010
std::map<SgNode*,int> p_scope_number_list : []

AstAttributes:
loopNestingInfo: 0,5

[Click here to go to the parent node](#)

AstAttributes:
loopNestingInfo: 0,5

pointer:0x7f3cce5a4010
SgVariableDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f3ccf214b40__scope____SgSS2____scope

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808760
Sg_File_Info* p_endOfConstruct : 0x7f3cce8087b8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xd02590
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 : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3cce5a4010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f3cce908c60]
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_visibility_attribute_enum p_gnu_extension_visibility : 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

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce908c60
SgInitializedName
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce5a4010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808708
Sg_File_Info* p_endOfConstruct : 0x7f3cce8086b0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xcffa0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : x
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f3cccf99010
SgInitializer* p_initptr : 0x7f3cce420010
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f3cce486010
SgStorageModifier* p_storageModifier : 0x104ec40
SgScopeStatement* p_scope : 0x7f3cce77a010
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::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
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
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
SgDeclarationModifier::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

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce420010
SgAssignInitializer
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce908c60
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808970
Sg_File_Info* p_endOfConstruct : 0x7f3cce808918
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xd66a40
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce808658
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgExpression* p_operand_i : 0x7f3cce453010
SgType* p_expression_type : 0

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce453010
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce420010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808868
Sg_File_Info* p_endOfConstruct : 0x7f3cce8088c0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xd64190
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce808600
SgExpression* p_originalExpressionTree : 0
int p_value : 1
std::string p_valueString : 1

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce38f010
SgForStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c4e8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c540
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xab82c0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601600
SgTypeTable* p_type_table : 0xa4c1a8
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 : 0x7f3cce358080
SgStatement* p_test : 0x7f3cce2bf010
SgExpression* p_increment : 0x7f3cce28c010
SgStatement* p_loop_body : 0x7f3cce38f138
SgStatement* p_else_body : 0
std::string p_string_label :

AstAttributes:
loopNestingInfo: 1,5

pointer:0x7f3cce358080
SgForInitStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808e40
Sg_File_Info* p_endOfConstruct : 0x7f3cce808e98
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x1034180
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgStatementPtrList p_init_stmt : [0x7f3cce5a42a0]

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce5a42a0
SgVariableDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f3ccf214b40__scope____SgSS2____scope

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce358080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808b80
Sg_File_Info* p_endOfConstruct : 0x7f3cce808bd8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x1027fe0
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 : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3cce5a42a0
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f3cce908da8]
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_visibility_attribute_enum p_gnu_extension_visibility : 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

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce908da8
SgInitializedName
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce5a42a0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808b28
Sg_File_Info* p_endOfConstruct : 0x7f3cce808ad0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf6c0b0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : i
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f3cccf99010
SgInitializer* p_initptr : 0x7f3cce420078
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f3cce486258
SgStorageModifier* p_storageModifier : 0x104ec68
SgScopeStatement* p_scope : 0x7f3cce38f010
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::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
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
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
SgDeclarationModifier::gnu_declaration_visibility_enum p_gnu_attribute_visibility : 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

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce420078
SgAssignInitializer
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce908da8
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808d90
Sg_File_Info* p_endOfConstruct : 0x7f3cce808d38
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xae5220
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce808a78
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgExpression* p_operand_i : 0x7f3cce453078
SgType* p_expression_type : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce453078
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce420078
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808c88
Sg_File_Info* p_endOfConstruct : 0x7f3cce808ce0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xadce40
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce808a20
SgExpression* p_originalExpressionTree : 0
int p_value : 1
std::string p_valueString : 1

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce2bf010
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809208
Sg_File_Info* p_endOfConstruct : 0x7f3cce809260
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x1088320
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce2ee010

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce2ee010
SgLessThanOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: bool

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809158
Sg_File_Info* p_endOfConstruct : 0x7f3cce8091b0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10835b0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809050
SgExpression* p_lhs_operand_i : 0x7f3cce325010
SgExpression* p_rhs_operand_i : 0x7f3cce4530e0
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce325010
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808f48
Sg_File_Info* p_endOfConstruct : 0x7f3cce808fa0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x1062bf0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce808de8
SgVariableSymbol* p_symbol : 0x10e57a0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce4530e0
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce808ff8
Sg_File_Info* p_endOfConstruct : 0x7f3cce808ef0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x106c4c0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce8090a8
SgExpression* p_originalExpressionTree : 0
int p_value : 10
std::string p_valueString : 10

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce28c010
SgPlusPlusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809418
Sg_File_Info* p_endOfConstruct : 0x7f3cce809470
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10b3830
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce808c30
SgExpression* p_operand_i : 0x7f3cce325078
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce325078
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce28c010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809310
Sg_File_Info* p_endOfConstruct : 0x7f3cce809368
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x109bb00
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809100
SgVariableSymbol* p_symbol : 0x10e57a0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce38f138
SgForStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c438
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c490
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xaa2960
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601730
SgTypeTable* p_type_table : 0xa4c1d0
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 : 0x7f3cce358160
SgStatement* p_test : 0x7f3cce2bf070
SgExpression* p_increment : 0x7f3cce28c078
SgStatement* p_loop_body : 0x7f3cce38f260
SgStatement* p_else_body : 0
std::string p_string_label :

AstAttributes:
loopNestingInfo: 2,4

pointer:0x7f3cce358160
SgForInitStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f138
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce8098e8
Sg_File_Info* p_endOfConstruct : 0x7f3cce809940
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xc34a40
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgStatementPtrList p_init_stmt : [0x7f3cce5a4530]

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce5a4530
SgVariableDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f3ccf214b40__scope____SgSS2____scope

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce358160
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809628
Sg_File_Info* p_endOfConstruct : 0x7f3cce809680
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf12570
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 : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3cce5a4530
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f3cce908ef0]
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_visibility_attribute_enum p_gnu_extension_visibility : 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

AstAttributes:

loopNestingInfo: 2,0

pointer:0x7f3cce908ef0
SgInitializedName
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce5a4530
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce8095d0
Sg_File_Info* p_endOfConstruct : 0x7f3cce809578
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10e2eb0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : j
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f3cccf99010
SgInitializer* p_initptr : 0x7f3cce4200e0
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f3cce4864a0
SgStorageModifier* p_storageModifier : 0x104ec90
SgScopeStatement* p_scope : 0x7f3cce38f138
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::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
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
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
SgDeclarationModifier::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

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce4200e0
SgAssignInitializer
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce908ef0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809838
Sg_File_Info* p_endOfConstruct : 0x7f3cce8097e0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10bf1e0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809520
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgExpression* p_operand_i : 0x7f3cce3250e0
SgType* p_expression_type : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce3250e0
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce4200e0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809730
Sg_File_Info* p_endOfConstruct : 0x7f3cce809788
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10b94c0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce8094c8
SgVariableSymbol* p_symbol : 0x10e57a0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce2bf070
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f138
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809cb0
Sg_File_Info* p_endOfConstruct : 0x7f3cce809d08
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xc9c5c0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce2ee080

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce2ee080
SgLessThanOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: bool

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf070
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809c00
Sg_File_Info* p_endOfConstruct : 0x7f3cce809c58
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xab4b00
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809af8
SgExpression* p_lhs_operand_i : 0x7f3cce325148
SgExpression* p_rhs_operand_i : 0x7f3cce453148
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce325148
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce8099f0
Sg_File_Info* p_endOfConstruct : 0x7f3cce809a48
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe96ad0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809890
SgVariableSymbol* p_symbol : 0x10e57d0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce453148
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809aa0
Sg_File_Info* p_endOfConstruct : 0x7f3cce809998
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xa88360
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809b50
SgExpression* p_originalExpressionTree : 0
int p_value : 10
std::string p_valueString : 10

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce28c078
SgPlusPlusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f138
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809ec0
Sg_File_Info* p_endOfConstruct : 0x7f3cce809f18
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xdad460
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce8096d8
SgExpression* p_operand_i : 0x7f3cce3251b0
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce3251b0
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce28c078
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce809db8
Sg_File_Info* p_endOfConstruct : 0x7f3cce809e10
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xdaae90
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809ba8
SgVariableSymbol* p_symbol : 0x10e57d0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce38f260
SgForStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.cpp
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f138
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c388
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c3e0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xdb3c70
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601860
SgTypeTable* p_type_table : 0xa4c1f8
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 : 0x7f3cce358240
SgStatement* p_test : 0x7f3cce2bf0d0
SgExpression* p_increment : 0x7f3cce28c0e0
SgStatement* p_loop_body : 0x7f3cce38f388
SgStatement* p_else_body : 0
std::string p_string_label :

AstAttributes:
loopNestingInfo: 3,3

pointer:0x7f3cce358240
SgForInitStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f260
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a390
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a3e8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xbbec20
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgStatementPtrList p_init_stmt : [0x7f3cce5a47c0]

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce5a47c0
SgVariableDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f3ccf214b40__scope____SgSS2____scope

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce358240
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a0d0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a128
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xb6d9f0
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 : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3cce5a47c0
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f3cce909038]
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_visibility_attribute_enum p_gnu_extension_visibility : 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

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce909038
SgInitializedName
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce5a47c0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a078
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a020
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xb68d20
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : k
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f3cccf99010
SgInitializer* p_initptr : 0x7f3cce420148
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f3cce4866e8
SgStorageModifier* p_storageModifier : 0x104ecb8
SgScopeStatement* p_scope : 0x7f3cce38f260
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::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
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
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
SgDeclarationModifier::gnu_declaration_visibility_enum p_gnu_attribute_visibility : 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

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce420148
SgAssignInitializer
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce909038
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a2e0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a288
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xb0a950
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809fc8
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgExpression* p_operand_i : 0x7f3cce325218
SgType* p_expression_type : 0

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce325218
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce420148
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a1d8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a230
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xdb6f90
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce809f70
SgVariableSymbol* p_symbol : 0x10e57a0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce2bf0d0
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f260
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a758
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a7b0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xae5810
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce2ee0f0

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce2ee0f0
SgLessThanOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: bool

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf0d0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a6a8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a700
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xd00f30
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80a5a0
SgExpression* p_lhs_operand_i : 0x7f3cce325280
SgExpression* p_rhs_operand_i : 0x7f3cce4531b0
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce325280
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee0f0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a498
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a4f0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xbc3770
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80a338
SgVariableSymbol* p_symbol : 0x10e5800
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce4531b0
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee0f0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a548
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a440
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xcf9a10
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80a5f8
SgExpression* p_originalExpressionTree : 0
int p_value : 10
std::string p_valueString : 10

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce28c0e0
SgPlusPlusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f260
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a968
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a9c0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xca3de0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80a180
SgExpression* p_operand_i : 0x7f3cce3252e8
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce3252e8
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce28c0e0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80a860
Sg_File_Info* p_endOfConstruct : 0x7f3cce80a8b8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf6e150
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80a650
SgVariableSymbol* p_symbol : 0x10e5800
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 3,0

pointer:0x7f3cce38f388
SgForStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f260
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c2d8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c330
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe90720
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601990
SgTypeTable* p_type_table : 0xa4c220
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 : 0x7f3cce358320
SgStatement* p_test : 0x7f3cce2bf130
SgExpression* p_increment : 0x7f3cce28c148
SgStatement* p_loop_body : 0x7f3cce38f4b0
SgStatement* p_else_body : 0
std::string p_string_label :

AstAttributes:
loopNestingInfo: 4,2

pointer:0x7f3cce358320
SgForInitStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f388
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ae38
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ae90
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x1053350
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgStatementPtrList p_init_stmt : [0x7f3cce5a4a50]

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce5a4a50
SgVariableDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f3ccf214b40__scope____SgSS2____scope

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce358320
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ab78
Sg_File_Info* p_endOfConstruct : 0x7f3cce80abd0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x102f190
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 : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3cce5a4a50
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f3cce909180]
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_visibility_attribute_enum p_gnu_extension_visibility : 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

AstAttributes:

loopNestingInfo: 4,0

pointer:0x7f3cce909180
SgInitializedName
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce5a4a50
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ab20
Sg_File_Info* p_endOfConstruct : 0x7f3cce80aac8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x102b170
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : l
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f3cccf99010
SgInitializer* p_initptr : 0x7f3cce4201b0
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f3cce486930
SgStorageModifier* p_storageModifier : 0x104ece0
SgScopeStatement* p_scope : 0x7f3cce38f388
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::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
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
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
SgDeclarationModifier::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

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce4201b0
SgAssignInitializer
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce909180
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ad88
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ad30
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xc9ea50
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80aa70
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgExpression* p_operand_i : 0x7f3cce325350
SgType* p_expression_type : 0

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce325350
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce4201b0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ac80
Sg_File_Info* p_endOfConstruct : 0x7f3cce80acd8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf75e40
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80aa18
SgVariableSymbol* p_symbol : 0x10e57a0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce2bf130
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f388
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b200
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b258
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10b6ef0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce2ee160

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce2ee160
SgLessThanOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: bool

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf130
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b150
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b1a8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10adb20
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80b048
SgExpression* p_lhs_operand_i : 0x7f3cce3253b8
SgExpression* p_rhs_operand_i : 0x7f3cce453218
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce3253b8
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee160
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80af40
Sg_File_Info* p_endOfConstruct : 0x7f3cce80af98
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x1092c60
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80ade0
SgVariableSymbol* p_symbol : 0x10e5830
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce453218
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee160
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80aff0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80aee8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x109a350
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80b0a0
SgExpression* p_originalExpressionTree : 0
int p_value : 10
std::string p_valueString : 10

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce28c148
SgPlusPlusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f388
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b410
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b468
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10d1460
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80ac28
SgExpression* p_operand_i : 0x7f3cce325420
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce325420
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce28c148
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b308
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b360
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10bd4d0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80b0f8
SgVariableSymbol* p_symbol : 0x10e5830
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 4,0

pointer:0x7f3cce38f4b0
SgForStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.cpp
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f388
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c228
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c280
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xc5e5c0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601ac0
SgTypeTable* p_type_table : 0xa4c248
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 : 0x7f3cce358400
SgStatement* p_test : 0x7f3cce2bf190
SgExpression* p_increment : 0x7f3cce28c1b0
SgStatement* p_loop_body : 0x7f3cce2bf1f0
SgStatement* p_else_body : 0
std::string p_string_label :

AstAttributes:
loopNestingInfo: 5,1

pointer:0x7f3cce358400
SgForInitStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f4b0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b8e0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b938
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xb68b90
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgStatementPtrList p_init_stmt : [0x7f3cce5a4ce0]

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce5a4ce0
SgVariableDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f3ccf214b40__scope____SgSS2____scope

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce358400
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b620
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b678
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xb09e60
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 : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3cce5a4ce0
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f3cce9092c8]
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_visibility_attribute_enum p_gnu_extension_visibility : 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

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce9092c8
SgInitializedName
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce5a4ce0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b5c8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b570
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xda9580
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : m
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f3cccf99010
SgInitializer* p_initptr : 0x7f3cce420218
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f3cce486b78
SgStorageModifier* p_storageModifier : 0x104ed08
SgScopeStatement* p_scope : 0x7f3cce38f4b0
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::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
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
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
SgDeclarationModifier::gnu_declaration_visibility_enum p_gnu_attribute_visibility : 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

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce420218
SgAssignInitializer
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce9092c8
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b830
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b7d8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10e3a30
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80b518
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgExpression* p_operand_i : 0x7f3cce325488
SgType* p_expression_type : 0

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce325488
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce420218
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b728
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b780
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10db110
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80b4c0
SgVariableSymbol* p_symbol : 0x10e57a0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce2bf190
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f4b0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80bca8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80bd00
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xcf90c0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce2ee1d0

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce2ee1d0
SgLessThanOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: bool

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf190
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80bbf8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80bc50
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xad8e40
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80baf0
SgExpression* p_lhs_operand_i : 0x7f3cce3254f0
SgExpression* p_rhs_operand_i : 0x7f3cce453280
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce3254f0
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee1d0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80b9e8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ba40
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xbb88d0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80b888
SgVariableSymbol* p_symbol : 0x10e5860
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce453280
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2ee1d0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ba98
Sg_File_Info* p_endOfConstruct : 0x7f3cce80b990
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xb74c40
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80bb48
SgExpression* p_originalExpressionTree : 0
int p_value : 10
std::string p_valueString : 10

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce28c1b0
SgPlusPlusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f4b0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80beb8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80bf10
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xa887b0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80b6d0
SgExpression* p_operand_i : 0x7f3cce325558
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce325558
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce28c1b0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80bdb0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80be08
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf16680
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80bba0
SgVariableSymbol* p_symbol : 0x10e5860
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce2bf1f0
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce38f4b0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c178
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c1d0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xb08610
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce28c218

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce28c218
SgPlusPlusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf1f0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c0c8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c120
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xbbce20
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80be60
SgExpression* p_operand_i : 0x7f3cce3255c0
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce3255c0
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce28c218
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80bfc0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c018
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xc99a10
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80bd58
SgVariableSymbol* p_symbol : 0x10e5770
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 5,0

pointer:0x7f3cce5a4f70
SgVariableDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f3ccf214b40__scope____SgSS2____scope

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c6f8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c750
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x107e830
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 : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3cce5a4f70
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f3cce909410]
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_visibility_attribute_enum p_gnu_extension_visibility : 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

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce909410
SgInitializedName
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce5a4f70
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c6a0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c648
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x1086550
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : i
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f3cccf99010
SgInitializer* p_initptr : 0x7f3cce420280
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f3cce486dc0
SgStorageModifier* p_storageModifier : 0x104ed30
SgScopeStatement* p_scope : 0x7f3cce77a010
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::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
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
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
SgDeclarationModifier::gnu_declaration_visibility_enum p_gnu_attribute_visibility : 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

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce420280
SgAssignInitializer
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce909410
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c908
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c8b0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xca2c70
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80c5f0
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgExpression* p_operand_i : 0x7f3cce4532e8
SgType* p_expression_type : 0

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce4532e8
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce420280
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80c800
Sg_File_Info* p_endOfConstruct : 0x7f3cce80c858
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xadbb20
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80c598
SgExpression* p_originalExpressionTree : 0
int p_value : 5
std::string p_valueString : 5

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce5a5200
SgVariableDeclaration
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f3ccf214b40__scope____SgSS2____scope

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80cb18
Sg_File_Info* p_endOfConstruct : 0x7f3cce80cb70
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10843d0
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 : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f3cce5a5200
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f3cce909558]
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_visibility_attribute_enum p_gnu_extension_visibility : 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

AstAttributes:

loopNestingInfo: 0,0

pointer:0x7f3cce909558
SgInitializedName
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce5a5200
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80cac0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ca68
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x102c740
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : j
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f3cccf99010
SgInitializer* p_initptr : 0x7f3cce4202e8
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f3cce487008
SgStorageModifier* p_storageModifier : 0x104ed58
SgScopeStatement* p_scope : 0x7f3cce77a010
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::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
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
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
SgDeclarationModifier::gnu_declaration_visibility_enum p_gnu_attribute_visibility : 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

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce4202e8
SgAssignInitializer
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce909558
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80cd28
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ccd0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x109b500
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80ca10
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgExpression* p_operand_i : 0x7f3cce453350
SgType* p_expression_type : 0

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce453350
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce4202e8
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80cc20
Sg_File_Info* p_endOfConstruct : 0x7f3cce80cc78
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10bf3e0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80c9b8
SgExpression* p_originalExpressionTree : 0
int p_value : 7
std::string p_valueString : 7

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce1fb010
SgWhileStmt
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80dfb8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e010
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf0a010
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601bf0
SgTypeTable* p_type_table : 0xa4c270
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatement* p_condition : 0x7f3cce2bf250
SgStatement* p_body : 0x7f3cce77a128
SgStatement* p_else_body : 0
SgLabelRefExp* p_end_numeric_label : 0
std::string p_string_label :
bool p_has_end_statement : 0

AstAttributes:
loopNestingInfo: 1,2

pointer:0x7f3cce2bf250
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1fb010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d0f0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d148
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xa7ff50
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce1c4010

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce1c4010
SgGreaterThanOrEqualOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: bool

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf250
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d040
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d098
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xc2e170
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80cf38
SgExpression* p_lhs_operand_i : 0x7f3cce325628
SgExpression* p_rhs_operand_i : 0x7f3cce4533b8
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce325628
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1c4010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ce30
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ce88
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xae4740
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80cbc8
SgVariableSymbol* p_symbol : 0x10e5890
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce4533b8
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1c4010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80cee0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80cdd8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf15b30
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80cf90
SgExpression* p_originalExpressionTree : 0
int p_value : 0
std::string p_valueString : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce77a128
SgBasicBlock
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1fb010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d1a0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d1f8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x108a4e0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601d20
SgTypeTable* p_type_table : 0xa4c298
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f3cce1fb138]
std::string p_asm_function_body :

AstAttributes:
loopNestingInfo: 1,1

pointer:0x7f3cce1fb138
SgWhileStmt
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a128
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80df08
Sg_File_Info* p_endOfConstruct : 0x7f3cce80df60
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10e19c0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601e50
SgTypeTable* p_type_table : 0xa4c2c0
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatement* p_condition : 0x7f3cce2bf2b0
SgStatement* p_body : 0x7f3cce77a240
SgStatement* p_else_body : 0
SgLabelRefExp* p_end_numeric_label : 0
std::string p_string_label :
bool p_has_end_statement : 0

AstAttributes:
loopNestingInfo: 2,1

pointer:0x7f3cce2bf2b0
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1fb138
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d568
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d5c0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10b8040
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce1c4080

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce1c4080
SgGreaterThanOrEqualOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: bool

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf2b0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d4b8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d510
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xab5330
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80d3b0
SgExpression* p_lhs_operand_i : 0x7f3cce325690
SgExpression* p_rhs_operand_i : 0x7f3cce453420
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce325690
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1c4080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d2a8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d300
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xabe670
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80cd80
SgVariableSymbol* p_symbol : 0x10e58c0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce453420
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1c4080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d358
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d250
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xc64660
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80d408
SgExpression* p_originalExpressionTree : 0
int p_value : 0
std::string p_valueString : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce77a240
SgBasicBlock
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1fb138
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d618
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d670
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10e1dd0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf601f80
SgTypeTable* p_type_table : 0xa4c2e8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f3cce2bf310, 0x7f3cce2bf370, 0x7f3cce2bf3d0]
std::string p_asm_function_body :

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce2bf310
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a240
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d8d8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d930
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10d9fc0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce28c280

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce28c280
SgPlusPlusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf310
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d828
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d880
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10d5bf0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80d460
SgExpression* p_operand_i : 0x7f3cce3256f8
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce3256f8
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce28c280
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d720
Sg_File_Info* p_endOfConstruct : 0x7f3cce80d778
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xbc58b0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80cfe8
SgVariableSymbol* p_symbol : 0x10e5770
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce2bf370
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a240
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80db98
Sg_File_Info* p_endOfConstruct : 0x7f3cce80dbf0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10db610
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce191010

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce191010
SgMinusMinusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf370
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80dae8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80db40
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10db060
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80d6c8
SgExpression* p_operand_i : 0x7f3cce325760
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce325760
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce191010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80d9e0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80da38
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10dbe10
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80d7d0
SgVariableSymbol* p_symbol : 0x10e58c0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce2bf3d0
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a240
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80de58
Sg_File_Info* p_endOfConstruct : 0x7f3cce80deb0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10dfc20
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce191078

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce191078
SgMinusMinusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf3d0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80dda8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80de00
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10dfe00
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80d988
SgExpression* p_operand_i : 0x7f3cce3257c8
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce3257c8
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce191078
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80dca0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80dcf8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10dd710
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80da90
SgVariableSymbol* p_symbol : 0x10e5890
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 2,0

pointer:0x7f3cce2bf430
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e380
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e3d8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10e25a0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce15a010

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce15a010
SgAssignOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf430
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e2d0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e328
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf0d000
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80e1c8
SgExpression* p_lhs_operand_i : 0x7f3cce325830
SgExpression* p_rhs_operand_i : 0x7f3cce453488
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce325830
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce15a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e0c0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e118
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0x10e0cb0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80dd50
SgVariableSymbol* p_symbol : 0x10e5890
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce453488
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce15a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e170
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e068
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf0ef50
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80e220
SgExpression* p_originalExpressionTree : 0
int p_value : 10
std::string p_valueString : 10

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce0d9010
SgDoWhileStmt
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ee28
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ee80
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe0d270
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf6020b0
SgTypeTable* p_type_table : 0xa4c310
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatement* p_body : 0x7f3cce77a358
SgStatement* p_condition : 0x7f3cce2bf490

AstAttributes:

loopNestingInfo: 1,1

pointer:0x7f3cce77a358
SgBasicBlock
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce0d9010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e7f8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e850
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf13e80
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f3ccf6021e0
SgTypeTable* p_type_table : 0xa4c338
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f3cce2bf4f0, 0x7f3cce2bf550]
std::string p_asm_function_body :

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce2bf4f0
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a358
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80eab8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80eb10
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf10120
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce28c2e8

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce28c2e8
SgPlusPlusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf4f0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ea08
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ea60
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf0f6e0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80e640
SgExpression* p_operand_i : 0x7f3cce325900
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce325900
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce28c2e8
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e900
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e958
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf0f3e0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80dc48
SgVariableSymbol* p_symbol : 0x10e5770
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce2bf550
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a358
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ed78
Sg_File_Info* p_endOfConstruct : 0x7f3cce80edd0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xac6910
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce1910e0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce1910e0
SgMinusMinusOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf550
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ecc8
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ed20
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf13380
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80e8a8
SgExpression* p_operand_i : 0x7f3cce325968
SgType* p_expression_type : 0
SgUnaryOp::Sgop_mode p_mode : 1

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce325968
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1910e0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ebc0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ec18
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf13690
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80e9b0
SgVariableSymbol* p_symbol : 0x10e5890
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce2bf490
SgExprStatement
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce0d9010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e748
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e7a0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe0dd00
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce1c40f0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce1c40f0
SgGreaterThanOrEqualOp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: bool

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce2bf490
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e698
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e6f0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf17980
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80e590
SgExpression* p_lhs_operand_i : 0x7f3cce325898
SgExpression* p_rhs_operand_i : 0x7f3cce4534f0
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce325898
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1c40f0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e488
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e4e0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf14940
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80e278
SgVariableSymbol* p_symbol : 0x10e5890
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce4534f0
SgIntVal
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce1c40f0
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80e538
Sg_File_Info* p_endOfConstruct : 0x7f3cce80e430
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xf16410
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80e5e8
SgExpression* p_originalExpressionTree : 0
int p_value : 0
std::string p_valueString : 0

AstAttributes:
loopNestingInfo: 1,0

pointer:0x7f3cce0aa010
SgReturnStmt
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing.c
IsTransformation:0
IsOutputInCodeGeneration:0

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce77a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80efe0
Sg_File_Info* p_endOfConstruct : 0x7f3cce80f038
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe17d00
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f3cce3259d0

AstAttributes:
loopNestingInfo: 0,0

pointer:0x7f3cce3259d0
SgVarRefExp
/home/demo/COP4934/Assignments/Assignment4/Ch7ASTTraversals/10LoopNestingInfoProcessing/inputCode_loopNestingInfoProcessing
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

[Click here to go to the parent node](#)

SgNode* p_parent : 0x7f3cce0aa010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f3cce80ef30
Sg_File_Info* p_endOfConstruct : 0x7f3cce80ef88
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0xe12060
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f3cce80eb68
SgVariableSymbol* p_symbol : 0x10e5770
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

AstAttributes:
loopNestingInfo: 0,0

