

pointer:0x7fd2c276e010

SgSourceFile

root node

SgNode* p_parent : 0x1373030

bool p_isModified : 1

bool p_containsTransformation : 0

\$CLASSNAME* p_freepointer : 0xffffffffffff

Sg_File_Info* p_startOfConstruct : 0x7fd2cd608080

SgStringList p_originalCommandLineArgumentList : <too long>: <too long>: [pdfGenerator, -std=c++11, -c, templateClassDeclaration.cpp,

int p_verbose : 0

bool p_output_warnings : 0

bool p_C_only : 0

bool p_Cxx_only : 1

bool p_Fortran_only : 0

bool p_CoArrayFortran_only : 0

int p_upc_threads : 0

bool p_Java_only : 0

bool p_Jovial_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_Csharp_only : 0

bool p_Ada_only : 0

bool p_Cobol_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_openacc : 0

bool p_openacc_parse_only : 0

bool p_openacc_ast_only : 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_skip_parser : 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_names : 0

bool p_unparse_instruction_addresses : 1

bool p_unparse_raw_memory_contents : 1

bool p_unparse_binary_file_format : 1

SgFile::languageOption_enum p_outputLanguage : 3

SgFile::languageOption_enum p_inputLanguage : 3

std::string p_sourceFileNameWithPath : /home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp

std::string p_sourceFileNameWithoutPath : templateClassDeclaration.cpp

std::string p_unparse_output_filename :

std::string p_objectFileNameWithPath :

std::string p_objectFileNameWithoutPath :

bool p_useBackendOnly : 0

pointer:0x7fd2cd57f128
SgGlobal
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 0:0
IsTransformation:0
IsOutputInCodeGeneration:0

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

SgNode* p_parent : 0x7fd2c276e010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2cd6080f0
Sg_File_Info* p_endOfConstruct : 0x7fd2cd608160
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7fd2cd529170
SgTypeTable* p_type_table : 0x13adab8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgPragma* p_pragma : 0
SgDeclarationStatementPtrList p_declarations : <too long>: <too long>: [0x7fd2c2457010, 0x7fd2c2457398, 0x7fd2c1e0e010, 0x7fd2c1e0e010]

pointer:0x7fd2bfc1f010
SgTemplateClassDeclaration
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 1:1
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: mypair__tas__no_tmpl_args__tae__

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

SgNode* p_parent : 0x7fd2cd57f128
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c5fd0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c6040
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7fd2bfc1f010
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fd2bfc1f450
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationScope* p_declarationScope : 0
bool p_unparse_template_ast : 0
SgName p_name : mypair
SgClassDeclaration::class_types p_class_type : 0
SgClassType* p_type : 0x7fd2bfbfe0010
SgClassDefinition* p_definition : 0x7fd2bfbfe33010
SgScopeStatement* p_scope : 0x7fd2cd57f128
SgDeclarationStatement::template_specialization_enum p_specialization : 1
bool p_from_template : 0
bool p_fixupScope : 0
bool p_isUnNamed : 0
bool p_explicit_annotation_interface : 0
bool p_explicit_interface : 0
bool p_explicit_enum : 0
bool p_explicit_anonymous : 0
SgExprListExp* p_decoratorList : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0
bool p_isAutonomousDeclaration : 1
bool p_isRepresentingTemplateParameterInTemplateDeclaration : 0
SgBaseClass* p_adaParentType : 0
SgTemplateParameterPtrList p_templateParameters : [0x7fd2bff80010]
SgTemplateArgumentPtrList p_templateSpecializationArguments : []
SgName p_string : <too long>: <too long>: template < class T > class mypair { T values [2]; public :
SgName p_templateName : mypair
SgDeclarationScope* p_nonreal_decl_scope : 0

pointer:0x7fd2bfe33010
SgTemplateClassDefinition
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 2:1
IsTransformation:0
IsOutputInCodeGeneration:0

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

SgNode* p_parent : 0x7fd2bfc1f010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c86c0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c8810
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7fd2cd529850
SgTypeTable* p_type_table : 0x13adb80
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgPragma* p_pragma : 0
SgDeclarationStatementPtrList p_members : [0x7fd2bf91e010, 0x7fd2bf42e010]
SgBaseClassPtrList p_inheritances : []
unsigned int p_packingAlignment : 0
bool p_isSequence : 0
bool p_isPrivate : 0
bool p_isAbstract : 0

pointer:0x7fd2bf91e010
SgVariableDeclaration
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 3:5
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: mypair__tas__no_tmpl_args__tae__variable_declaration__variable_type__Ab__templ_param_1_1__ind

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

SgNode* p_parent : 0x7fd2bfe33010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c6ac0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c6b30
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fd2bf91e010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationScope* p_declarationScope : 0
bool p_unparse_template_ast : 0
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7fd2c033a480]
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 : 1
SgVariableDeclaration::gnu_extension_declaration_attributes_enum p_gnu_extension_declaration_attribute : 1
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
bool p_builtFromUseOnly : 0

pointer:0x7fd2c033a480
SgInitializedName
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 3:5
IsTransformation:0
IsOutputInCodeGeneration:0

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SgNode* p_parent : 0x7fd2bf91e010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c6a50
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c69e0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : values
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7fd2bfad8010
SgInitializer* p_initptr : 0
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7fd2bf79f010
SgStorageModifier* p_storageModifier : 0x239b9a0
SgScopeStatement* p_scope : 0x7fd2bfe33010
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 : 0
bool p_protected_declaration : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 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
SgType * p_auto_decltype : 0
bool p_using_device_keyword : 0
bool p_is_braced_initialized : 0
bool p_using_assignment_copy_constructor_syntax : 0
bool p_needs_definitions : 0
bool p_is_parameter_pack : 0
bool p_is_pack_element : 0

pointer:0x7fd2bf42e010
SgTemplateMemberFunctionDeclaration
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 5:5
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L1R__L2R

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

SgNode* p_parent : 0x7fd2bfe33010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c6900
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c6970
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 0
bool p_forward : 1
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7fd2bf42e5d8
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fd2bf42e010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationScope* p_declarationScope : 0
bool p_unparse_template_ast : 0
SgName p_name : mypair
SgFunctionParameterList* p_parameterList : 0x7fd2c0487640
SgFunctionModifier p_functionModifier : <too long>: <too long>: SgFunctionModifier(isUnknown() = false isDefault() = true isInline()
SgSpecialFunctionModifier p_specialFunctionModifier : <too long>: <too long>: SgSpecialFunctionModifier(isUnknown() = false isDefault()
SgTypePtrList p_exceptionSpecification : []
bool p_named_in_end_statement : 0
std::string p_asm_name :
SgExprListExp* p_decoratorList : 0
SgFunctionType* p_type : 0x7fd2bf701010
SgFunctionDefinition* p_definition : 0
bool p_oldStyleDefinition : 0
SgScopeStatement* p_scope : 0x7fd2bfe33010
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_visibility_attribute_enum p_gnu_extension_visibility : 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
SgFunctionParameterList* p_parameterList_syntax : 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
bool p_is_implicit_function : 0
SgDeclarationStatement* p_declarationStatement : 0x7fd2bf42e010

pointer:0x7fd2c0487640
SgFunctionParameterList
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 5:5
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L2R

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

SgNode* p_parent : 0x7fd2bf42e010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c6f20
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c6f90
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFrien
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fd2c0487640
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationScope* p_declarationScope : 0
bool p_unparse_template_ast : 0
SgInitializedNamePtrList p_args : [0x7fd2c033a688, 0x7fd2c033a890]

pointer:0x7fd2c033a688
SgInitializedName
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 5:15
IsTransformation:0
IsOutputInCodeGeneration:0

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SgNode* p_parent : 0x7fd2c0487640
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c6c80
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c6cf0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : first
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7fd2bffaf010
SgInitializer* p_initptr : 0
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7fd2bf42e010
SgStorageModifier* p_storageModifier : 0x239b9c8
SgScopeStatement* p_scope : 0x7fd2bfe33010
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 : 0
bool p_protected_declaration : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 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
SgType * p_auto_decltype : 0
bool p_using_device_keyword : 0
bool p_is_braced_initialized : 0
bool p_using_assignment_copy_constructor_syntax : 0
bool p_needs_definitions : 0
bool p_is_parameter_pack : 0
bool p_is_pack_element : 0

pointer:0x7fd2c033a890
SgInitializedName
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 5:24
IsTransformation:0
IsOutputInCodeGeneration:0

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SgNode* p_parent : 0x7fd2c0487640
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c6d60
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c6dd0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : second
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7fd2bffa010
SgInitializer* p_initptr : 0
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7fd2bf42e010
SgStorageModifier* p_storageModifier : 0x239b9f0
SgScopeStatement* p_scope : 0x7fd2bfe33010
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 : 0
bool p_protected_declaration : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 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
SgType * p_auto_decltype : 0
bool p_using_device_keyword : 0
bool p_is_braced_initialized : 0
bool p_using_assignment_copy_constructor_syntax : 0
bool p_needs_definitions : 0
bool p_is_parameter_pack : 0
bool p_is_pack_element : 0

pointer:0x7fd2bf2ab010
SgCtorInitializerList
NULL_FILE 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Declaration mangled name: mypair__tas__no_tmpl_args__tae__constructor_initialization_list__

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

SgNode* p_parent : 0x7fd2bf42e010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c6e40
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c6eb0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFriend() = false)
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7fd2bf2ab010
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fd2bf2ab010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationScope* p_declarationScope : 0
bool p_unparse_template_ast : 0
SgInitializedNamePtrList p_ctors : []

pointer:0x7fd2bf42e5d8
SgTemplateMemberFunctionDeclaration
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 5:5
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L3R__L4R

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

SgNode* p_parent : 0x7fd2cd57f128
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7070
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7000
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7fd2bf42e5d8
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fd2bf42e010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationScope* p_declarationScope : 0
bool p_unparse_template_ast : 0
SgName p_name : mypair
SgFunctionParameterList* p_parameterList : 0x7fd2c0487958
SgFunctionModifier p_functionModifier : <too long>: <too long>: SgFunctionModifier(isUnknown() = false isDefault() = true isInline()
SgSpecialFunctionModifier p_specialFunctionModifier : <too long>: <too long>: SgSpecialFunctionModifier(isUnknown() = false isDefault()
SgTypePtrList p_exceptionSpecification : []
bool p_named_in_end_statement : 0
std::string p_asm_name :
SgExprListExp* p_decoratorList : 0
SgFunctionType* p_type : 0x7fd2bf701010
SgFunctionDefinition* p_definition : 0x7fd2bf16a010
bool p_oldStyleDefinition : 0
SgScopeStatement* p_scope : 0x7fd2bfe33010
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_visibility_attribute_enum p_gnu_extension_visibility : 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
SgFunctionParameterList* p_parameterList_syntax : 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 : 1
bool p_is_implicit_function : 0
SgDeclarationStatement* p_definition : 0x7fd2bf42e5d8

pointer:0x7fd2c0487958
SgFunctionParameterList
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 5:5
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L4R

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

SgNode* p_parent : 0x7fd2bf42e5d8
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7540
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c75b0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFrien
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fd2c0487958
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationScope* p_declarationScope : 0
bool p_unparse_template_ast : 0
SgInitializedNamePtrList p_args : [0x7fd2c033aa98, 0x7fd2c033aca0]

pointer:0x7fd2c033aa98
SgInitializedName
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 5:15
IsTransformation:0
IsOutputInCodeGeneration:0

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

SgNode* p_parent : 0x7fd2c0487958
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c70e0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7150
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : first
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7fd2bffa010
SgInitializer* p_initptr : 0
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7fd2bf42e5d8
SgStorageModifier* p_storageModifier : 0x239ba18
SgScopeStatement* p_scope : 0x7fd2bf16a010
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 : 0
bool p_protected_declaration : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 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
SgType * p_auto_decltype : 0
bool p_using_device_keyword : 0
bool p_is_braced_initialized : 0
bool p_using_assignment_copy_constructor_syntax : 0
bool p_needs_definitions : 0
bool p_is_parameter_pack : 0
bool p_is_pack_element : 0

pointer:0x7fd2c033aca0
SgInitializedName
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 5:24
IsTransformation:0
IsOutputInCodeGeneration:0

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

SgNode* p_parent : 0x7fd2c0487958
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c71c0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7230
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : second
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7fd2bffa010
SgInitializer* p_initptr : 0
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7fd2bf42e5d8
SgStorageModifier* p_storageModifier : 0x239ba40
SgScopeStatement* p_scope : 0x7fd2bf16a010
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 : 0
bool p_protected_declaration : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 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
SgType * p_auto_decltype : 0
bool p_using_device_keyword : 0
bool p_is_braced_initialized : 0
bool p_using_assignment_copy_constructor_syntax : 0
bool p_needs_definitions : 0
bool p_is_parameter_pack : 0
bool p_is_pack_element : 0

pointer:0x7fd2bf16a010
SgFunctionDefinition
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 6:5
IsTransformation:0
IsOutputInCodeGeneration:0

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

SgNode* p_parent : 0x7fd2bf42e5d8
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c72a0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7310
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7fd2cd529b10
SgTypeTable* p_type_table : 0x13adbd0
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgPragma* p_pragma : 0
SgBasicBlock* p_body : 0x7fd2bf203010
std::map<SgNode*,int> p_scope_number_list : []

pointer:0x7fd2bf203010
SgBasicBlock
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 6:5
IsTransformation:0
IsOutputInCodeGeneration:0

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

SgNode* p_parent : 0x7fd2bf16a010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c6c10
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c6ba0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7fd2cd5299b0
SgTypeTable* p_type_table : 0x13adba8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgPragma* p_pragma : 0
SgStatementPtrList p_statements : [0x7fd2bf030010, 0x7fd2bf030070]
std::string p_asm_function_body :
std::string p_string_label :

pointer:0x7fd2bf030010
SgExprStatement
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:7
IsTransformation:0
IsOutputInCodeGeneration:0

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

SgNode* p_parent : 0x7fd2bf203010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7f50
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7fc0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7fd2bf05f010

pointer:0x7fd2bf05f010
SgAssignOp
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:16
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: T

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

SgNode* p_parent : 0x7fd2bf030010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7e70
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7ee0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c7b60
SgExpression* p_lhs_operand_i : 0x7fd2bf096010
SgExpression* p_rhs_operand_i : 0x7fd2bf104078
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

pointer:0x7fd2bf096010
SgPntrArrRefExp
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:13
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: T

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

SgNode* p_parent : 0x7fd2bf05f010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7bd0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7c40
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c7a80
SgExpression* p_lhs_operand_i : 0x7fd2bf0cd010
SgExpression* p_rhs_operand_i : 0x7fd2bfb62090
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

pointer:0x7fd2bf0cd010
SgArrowExp
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: T [2]

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

SgNode* p_parent : 0x7fd2bf096010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c78c0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7770
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c79a0
SgExpression* p_lhs_operand_i : 0x7fd2bf137010
SgExpression* p_rhs_operand_i : 0x7fd2bf104010
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

pointer:0x7fd2bf137010
SgThisExp
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: template ::mypair{private: T values[2];public: }*

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

SgNode* p_parent : 0x7fd2bf0cd010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7690
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7700
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c7380
SgClassSymbol* p_class_symbol : 0x23fb1e0
SgNonrealSymbol* p_nonreal_symbol : 0
int p_pobj_this : 0

pointer:0x7fd2bf104010
SgVarRefExp
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:7
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: T [2]

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

SgNode* p_parent : 0x7fd2bf0cd010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c77e0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7850
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c73f0
SgVariableSymbol* p_symbol : 0x2412dd0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

pointer:0x7fd2bfb62090
SgIntVal
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:14
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

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

SgNode* p_parent : 0x7fd2bfb62090
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7a10
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7620
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c7af0
SgExpression* p_originalExpressionTree : 0
int p_value : 0
std::string p_valueString :

pointer:0x7fd2bf104078
SgVarRefExp
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:17
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: T

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

SgNode* p_parent : 0x7fd2bf05f010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7d20
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c7d90
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c7930
SgVariableSymbol* p_symbol : 0x2412e00
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

pointer:0x7fd2bf030070
SgExprStatement
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:24
IsTransformation:0
IsOutputInCodeGeneration:0

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

SgNode* p_parent : 0x7fd2bf203010
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c8960
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c89d0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7fd2bf05f080

pointer:0x7fd2bf05f080
SgAssignOp
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:33
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: T

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

SgNode* p_parent : 0x7fd2bf030070
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c8880
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c88f0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c8570
SgExpression* p_lhs_operand_i : 0x7fd2bf096080
SgExpression* p_rhs_operand_i : 0x7fd2bf104148
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

pointer:0x7fd2bf096080
SgPntrArrRefExp
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:30
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: T

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

SgNode* p_parent : 0x7fd2bf05f080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c85e0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c8650
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c8490
SgExpression* p_lhs_operand_i : 0x7fd2bf0cd080
SgExpression* p_rhs_operand_i : 0x7fd2bfb62110
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

pointer:0x7fd2bf0cd080
SgArrowExp
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: T [2]

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

SgNode* p_parent : 0x7fd2bf096080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c82d0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c8180
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c83b0
SgExpression* p_lhs_operand_i : 0x7fd2bf137078
SgExpression* p_rhs_operand_i : 0x7fd2bf1040e0
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

pointer:0x7fd2bf137078
SgThisExp
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: template ::mypair{private: T values[2];public: }*

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SgNode* p_parent : 0x7fd2bf0cd080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c80a0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c8110
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c7e00
SgClassSymbol* p_class_symbol : 0x23fb1e0
SgNonrealSymbol* p_nonreal_symbol : 0
int p_pobj_this : 0

pointer:0x7fd2bf1040e0
SgVarRefExp
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:24
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: T [2]

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SgNode* p_parent : 0x7fd2bf0cd080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c81f0
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c8260
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c7cb0
SgVariableSymbol* p_symbol : 0x2412dd0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

pointer:0x7fd2bfb62110
SgIntVal
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:31
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

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SgNode* p_parent : 0x7fd2bf096080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c8420
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c8030
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c8500
SgExpression* p_originalExpressionTree : 0
int p_value : 1
std::string p_valueString :

pointer:0x7fd2bf104148
SgVarRefExp
/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/templateClassDeclaration.cpp 7:34
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: T

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SgNode* p_parent : 0x7fd2bf05f080
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c8730
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c87a0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7fd2c01c8340
SgVariableSymbol* p_symbol : 0x2412e30
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

pointer:0x7fd2bf2ab328
SgCtorInitializerList
NULL_FILE 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Declaration mangled name: mypair__tas__no_tmpl_args__tae__constructor_initialization_list__

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SgNode* p_parent : 0x7fd2bf42e5d8
bool p_isModified : 0
bool p_containsTransformation : 0
\$CLASSNAME* p_freepointer : 0xffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7fd2c01c7460
Sg_File_Info* p_endOfConstruct : 0x7fd2c01c74d0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFriend() = false)
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7fd2bf2ab328
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7fd2bf2ab328
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationScope* p_declarationScope : 0
bool p_unparse_template_ast : 0
SgInitializedNamePtrList p_ctors : []

