```
pointer:0x7efd1c57d010
SgSourceFile
```

root node

```
SgNode* p_parent: 0x718080
bool p isModified: 1
bool p containsTransformation: 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
Sq File Info* p startOfConstruct : 0x7efd2803c080
SgStringList p_originalCommandLineArgumentList : [pdfGenerator, -c, test.ads]
int p_verbose: 0
bool p_output_warnings: 0
bool p_C_only: 0
bool p_Cxx_only: 0
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: 1
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 : 12
SgFile::languageOption_enum p_inputLanguage: 12
std::string p_sourceFileNameWithPath:/home/liao6/workspace/ada-to-cpp-FY21/rose-ast/ada/test.ads
std::string p_sourceFileNameWithoutPath: test.ads
std::string p_unparse_output_filename:
std::string p_objectFileNameWithPath:
std::string p_objectFileNameWithoutPath:
bool p useBackendOnly: 0
```

pointer:0x7efd27fb3128 SgGlobal /home/liao6/workspace/ada-to-cpp-FY21/rose-ast/ada/test.ads 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

```
SgNode* p_parent : 0x7efd1c57d010
bool p_isModified: 1
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7efd2803c0f0
Sg_File_Info* p_endOfConstruct : 0x7efd2803c160
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: 0
SgSymbolTable* p_symbol_table: 0x7efd27f5d170
SgTypeTable* p_type_table: 0x752ae8
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 : [0x7efd1bfd9010]
```

pointer:0x7efd1bfd9010 SgAdaPackageSpecDecl Test Unit.ads 3:1 IsTransformation:0 IsOutputInCodeGeneration:1

SgName p_name : Test_Unit

SgAdaPackageSpec* p_definition: 0x7efd1c4f0130 SgScopeStatement* p_scope : 0x7efd27fb3128

Declaration mangled name: ada\$pkg\$Test_Unit

Click here to go to the parent node

```
SgNode* p_parent : 0x7efd27fb3128
bool p_isModified: 1
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7efd2803c860
Sg_File_Info* p_endOfConstruct : 0x7efd2803c8d0
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: 0x7efd1bfd9010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgDeclarationScope* p_declarationScope : 0
```

pointer:0x7efd1c4f0130 SgAdaPackageSpec transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1

Click here to go to the parent node

```
SgNode* p_parent : 0x7efd1bfd9010
bool p isModified: 1
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7efd2803c5c0
Sg_File_Info* p_endOfConstruct : 0x7efd2803c630
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: 2
SgSymbolTable* p_symbol_table : 0x7efd27f5d4e0
SgTypeTable* p_type_table : 0x752b60
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
SgAdaPackageBody* p_body: 0
SgDeclarationStatementPtrList p_declarations : [0x7efd1c1b7390]
```

pointer:0x7efd1c1b7390 SgTypedefDeclaration transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1

Click here to go to the parent node

int p_name_qualification_length_for_base_type : 0
bool p_type_elaboration_required_for_base_type : 0
bool p_global_qualification_required_for_base_type : 0

bool p_isAutonomousDeclaration : 1
bool p_isAssociatedWithDeclarationList : 0
bool p_isFirstDeclarationOfDeclarationList : 1

int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

Declaration mangled name: LOR

```
SgNode* p_parent: 0x7efd1c4f0130
bool p isModified: 1
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7efd2803d200
Sg_File_Info* p_endOfConstruct : 0x7efd2803d270
AttachedPreprocessingInfoType* p attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: 3
unsigned int p decl attributes: 0
std::string p_linkage:
SqDeclarationModifier p_declarationModifier : <too long>: <too long>: SqDeclarationModifier(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: 0x7efd1c1b7390
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p binding label:
SgDeclarationScope* p_declarationScope: 0
SgName p_name: Range_Type
SgType* p_base_type : 0x7efd1be2d010
SgTypedefType* p_type: 0x7efd1c174120
SqDeclarationStatement* p declaration: 0
SgSymbol* p_parent_scope : 0x827f10
bool p_typedefBaseTypeContainsDefiningDeclaration: 0
SgScopeStatement* p_scope : 0x7efd1c4f0130
bool p_requiresGlobalNameQualificationOnType: 0
```