Artisan Testing Results

July 24, 2023

1   C++98

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Arraytypetraitexpr	0.01	True	0.02	True	0	False	0	False
Cxxbindtemporaryexpr	0.01	True	0.02	True	0	False	0	False
Cxxboolliteralexpr	0.01	True	0.01	True	0	False	0	False
Cxxconstcastexpr	0.01	True	0.02	True	0	False	0	False
Cxxconstructexpr	0.01	True	0.02	True	0	False	0	False
Cxxconversiondecl	0.01	True	0.01	True	0	False	0	False
Cxxdefaultargexpr	0.01	True	0.01	True	0	False	0	False
Cxxdependentscopememberexpr	0.01	True	0.02	True	0	False	0	False
Cxxdestructordecl	0.01	True	0.01	True	0	False	0	False
Cxxdynamiccastexpr	0.02	True	0.02	True	0	False	0	False
Cxxfoldexpr	0.02	True	0.02	True	0	False	0	False
Cxxfunctionalcastexpr	0.01	True	0.02	True	0	False	0	False
Cxxmembercallexpr	0.01	True	0.02	True	0	False	0	False
Cxxnewexpr	0.01	True	0.01	True	0	False	0	False
Cxxoperatorcallexpr	0.02	True	0.02	True	0	False	0	False
Cxxpseudodestructorexpr	0.01	True	0.01	True	0	False	0	False
Cxxreinterpretcastexpr	0.01	True	0.01	True	0	False	0	False
Cxxscalarvalueinitexpr	0.01	True	0.01	True	0	False	0	False
Cxxstaticcastexpr	0.01	True	0.01	True	0	False	0	False
Cxxthisexpr	0.01	True	0.02	True	0	False	0	False
Cxxthrowexpr	0.23	True	0.24	True	0	False	0	False
Cxxtypeidexpr	0.25	True	0.25	True	0	False	0	False
Cxxunresolvedconstructexpr	0.01	True	0.01	True	0	False	0	False
Classscopefunctionspecializationdecl	0.01	True	0.01	True	0	False	0	False
Classtemplatepartialspecializationdecl	0.01	True	0.02	True	0	False	0	False
Classtemplatespecializationdecl	0.01	True	0.01	True	0	False	0	False
Dependentscopedeclrefexpr	0.02	True	0.02	True	0	False	0	False
Exprwithcleanups	0.02	True	0.02	True	0	False	0	False
Filescopeasmdecl	0.01	True	0.01	True	0	False	0	False
Frienddecl	0.01	True	0.02	True	0	False	0	False
Functiontemplatedecl	0.01	True	0.01	True	0	False	0	False
Gnunullexpr	0.01	True	0.01	True	0	False	0	False

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Implicitcastexpr	0.01	True	0.02	True	0	False	0	False
Initlistexpr	0.01	True	0.02	True	0	False	0	False
Linkagespecdecl	0.01	True	0.01	True	0	False	0	False
Materializetemporaryexpr	0.01	True	0.01	True	0	False	0	False
Namespacealiasdecl	0.01	True	0.02	True	0	False	0	False
Namespacedecl	0.01	True	0.01	True	0	False	0	False
Nontypetemplateparmdecl	0.01	True	0.01	True	0	False	0	False
Opaquevalueexpr	0.01	True	0.02	True	0	False	0	False
Parenlistexpr	0.01	True	0.02	True	0	False	0	False
Sizeofpackexpr	0.01	True	0.01	True	0	False	0	False
Substnontypetemplateparmexpr	0.24	True	0.24	True	0	False	0	False
Templatetypeparmdecl	0.01	True	0.01	True	0	False	0	False
Unresolvedusingvaluedecl	0.01	True	0.02	True	0	False	0	False
Usingdirectivedecl	0.01	True	0.01	True	0	False	0	False
Vaargexpr	0.04	True	0.04	True	0	False	0	False
And	0.01	True	0.01	True	0	False	0	False
And_eq	0.01	True	0.02	True	0	False	0	False
Bitand	0.01	True	0.02	True	0	False	0	False
Bitor	0.01	True	0.01	True	0	False	0	False
Bool	0.02	True	0.02	True	0	False	0	False
Break_do	0.01	True	0.01	True	0	False	0	False
Break_for	0.01	True	0.01	True	0	False	0	False
Break_switch	0.01	True	0.01	True	0	False	0	False
Break_while	0.01	True	0.01	True	0	False	0	False
Case	0.01	True	0.01	True	0	False	0	False
Catch	0.01	True	0.01	True	0	False	0	False
Char	0.01	True	0.01	True	0	False	0	False
Class	0.01	True	0.01	True	0	False	0	False
Class_public	0.01	True	0.01	True	0	False	0	False
Compl	0.01	True	0.01	True	0	False	0	False
Const	0.01	True	0.01	True	0	False	0	False
Const_cast	0.01	True	0.02	True	0	False	0	False
Continue_do_while_loop	0.01	True	0.01	True	0	False	0	False
Continue_for_loop	0.01	True	0.02	True	0	False	0	False
Continue_while_loop	0.01	True	0.02	True	0	False	0	False
Default	0.01	True	0.01	True	0	False	0	False
Delete_ptr	0.01	True	0.01	True	0	False	0	False
Do_while	0.01	True	0.01	True	0	False	0	False
Double_var_decl	0.01	True	0.02	True	0	False	0	False
Dynamic_cast	0.01	True	0.02	True	0	False	0	False
Enum_decl	0.01	True	0.01	True	0	False	0	False
Explicit_struct_member_decl	0.01	True	0.01	True	0	False	0	False
Extern_language_func_decl	0.01	True	0.01	True	0	False	0	False
False	0.01	True	0.01	True	0	False	0	False

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Float_var_decl	0.01	True	0.01	True	0	False	0	False
For_loop	0.01	True	0.01	True	0	False	0	False
Friend_member_decl	0.01	True	0.01	True	0	False	0	False
Goto	0.01	True	0.01	True	0	False	0	False
If	0.01	True	0.01	True	0	False	0	False
If_else	0.01	True	0.01	True	0	False	0	False
Inline_func_decl	0.01	True	0.01	True	0	False	0	False
Int_var_decl	0.01	True	0.01	True	0	False	0	False
Long_var_decl	0.01	True	0.01	True	0	False	0	False
Mutable_struct_member_decl	0.04	True	0.04	True	0	False	0	False
Named_union_decl	0.01	True	0.01	True	0	False	0	False
Namespace	0.01	True	0.01	True	0	False	0	False
New	0.01	True	0.01	True	0	False	0	False
Not	0.01	True	0.01	True	0	False	0	False
Not_eq	0.01	True	0.01	True	0	False	0	False
Operator	0.01	True	0.02	True	0	False	0	False
Or	0.01	True	0.01	True	0	False	0	False
Or_eq	0.02	True	0.02	True	0	False	0	False
Private	0.01	True	0.01	True	0	False	0	False
Protected_member_decl	0.01	True	0.01	True	0	False	0	False
Register	0.01	True	0.01	True	0	False	0	False
Return	0.01	True	0.02	True	0	False	0	False
Short_val_decl	0.01	True	0.01	True	0	False	0	False
Signed_var_decl	0.01	True	0.02	True	0	False	0	False
Sizeof	0.01	True	0.01	True	0	False	0	False
Static_cast	0.01	True	0.01	True	0	False	0	False
Static_var_decl	0.01	True	0.01	True	0	False	0	False
Struct_decl	0.01	True	0.02	True	0	False	0	False
Switch_case	0.01	True	0.02	True	0	False	0	False
Template_decl	0.01	True	0.01	True	0	False	0	False
Template_typename	0.01	True	0.01	True	0	False	0	False
This	0.01	True	0.02	True	0	False	0	False
Throw	0.26	True	0.26	True	0	False	0	False
True	0.01	True	0.01	True	0	False	0	False
Try	0.04	True	0.04	True	0	False	0	False
Typedef	0.01	True	0.01	True	0	False	0	False
Typeid	0.02	True	0.02	True	0	False	0	False
Unsigned_var_decl	0.01	True	0.01	True	0	False	0	False
Using	0.02	True	0.02	True	0	False	0	False
Using_namespace	0.02	True	0.02	True	0	False	0	False
Virtual_struct_member_decl	0.01	True	0.01	True	0	False	0	False
Void_func_decl	0.01	True	0.01	True	0	False	0	False
Volatile_var_decl	0.03	True	0.04	True	0	False	0	False
Wchar_t_var_decl	0.01	True	0.01	True	0	False	0	False

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
While_loop	0.01	True	0.02	True	0	False	0	False
Xor	0.01	True	0.01	True	0	False	0	False
Xor_eq	0.01	True	0.01	True	0	False	0	False
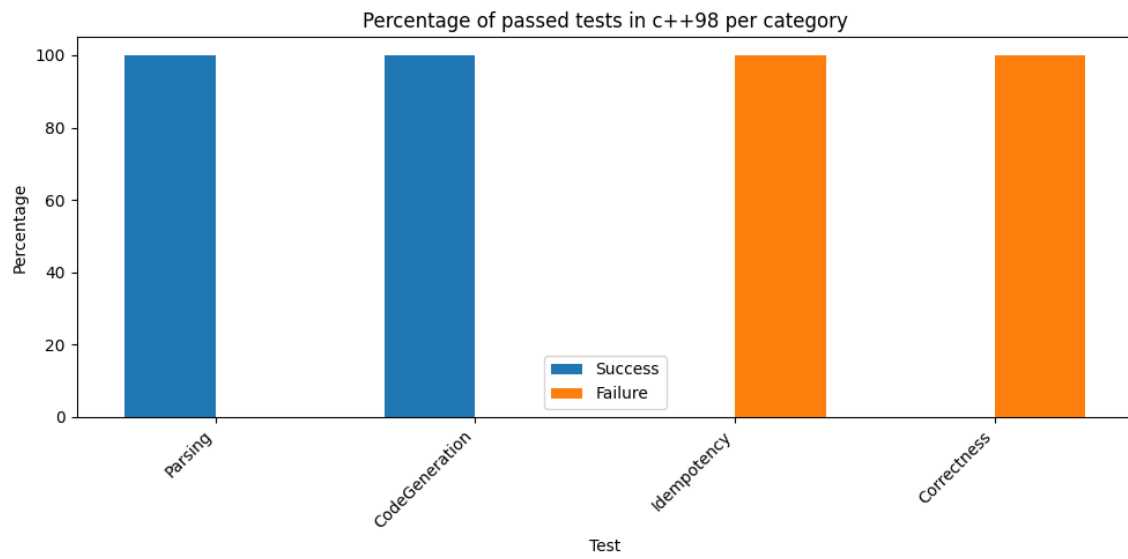
Figure 1: Percentage of passed tests in c++98

2 C++11

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Arrayinitindexexpr	0.01	True	0.01	True	0	False	0	False
Arrayinitloopexpr	0.01	True	0.02	True	0	False	0	False
Atomicexpr	0.02	True	0.02	True	0	False	0	False
Cxxdefaultinitexpr	0.01	True	0.01	True	0	False	0	False
Cxxdeleteexpr	0.01	True	0.02	True	0	False	0	False
Cxxforrangestmt	0.01	True	0.02	True	0	False	0	False
Cxxinheritedctorinitexpr	0.02	True	0.02	True	0	False	0	False
Cxxnoexceptexpr	0.02	True	0.02	True	0	False	0	False
Cxxnullptrliteralexpr	0.01	True	0.02	True	0	False	0	False
Cxxstdinitializerlistexpr	0.02	True	0.02	True	0	False	0	False
Constantexpr	0.02	True	0.02	True	0	False	0	False
Constructorusingshadowdecl	0.01	True	0.02	True	0	False	0	False
Lambdaexpr	0.01	True	0.02	True	0	False	0	False
Packexpansionexpr	0.02	True	0.02	True	0	False	0	False
Typealiasdecl	0.01	True	0.01	True	0	False	0	False
Typetraitexpr	0.04	True	0.04	True	0	False	0	False
Unresolvedlookupexpr	0.01	True	0.02	True	0	False	0	False
Unresolvedusingtypenamedecl	0.02	True	0.02	True	0	False	0	False
Userdefinedliteral	0.17	True	0.17	True	0	False	0	False
Alignas	0.01	True	0.02	True	0	False	0	False
Alignof	0.24	True	0.24	True	0	False	0	False
Auto	0.01	True	0.01	True	0	False	0	False
Char16_t	0.01	True	0.01	True	0	False	0	False
Char32_t	0.01	True	0.01	True	0	False	0	False
Constexpr	0.01	True	0.01	True	0	False	0	False
Decltype	0.01	True	0.02	True	0	False	0	False
Noexcept	0.01	True	0.01	True	0	False	0	False
Nullptr	0.01	True	0.01	True	0	False	0	False
Reinterpret_cast	0.04	True	0.04	True	0	False	0	False
Static_assert	0.03	True	0.03	True	0	False	0	False
Thread_local	0.43	True	0.43	True	0	False	0	False
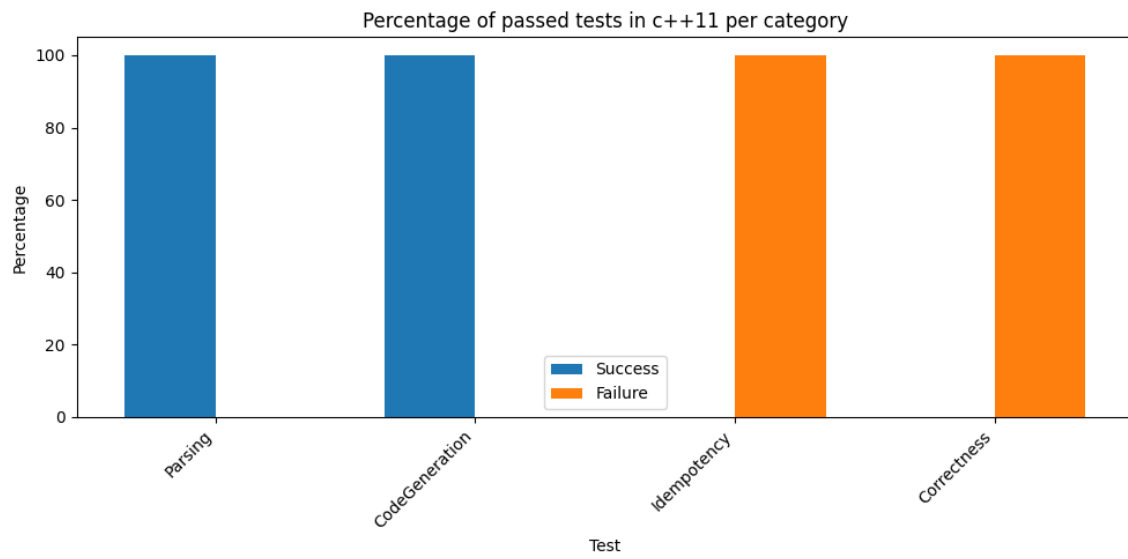
Figure 2: Percentage of passed tests in c++11

3 C++14

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Vartemplatedecl	0.02	True	0.02	True	0	False	0	False
Vartemplatepartialspecializationdecl	0.02	True	0.02	True	0	False	0	False
Vartemplatespecializationdecl	0.01	True	0.02	True	0	False	0	False
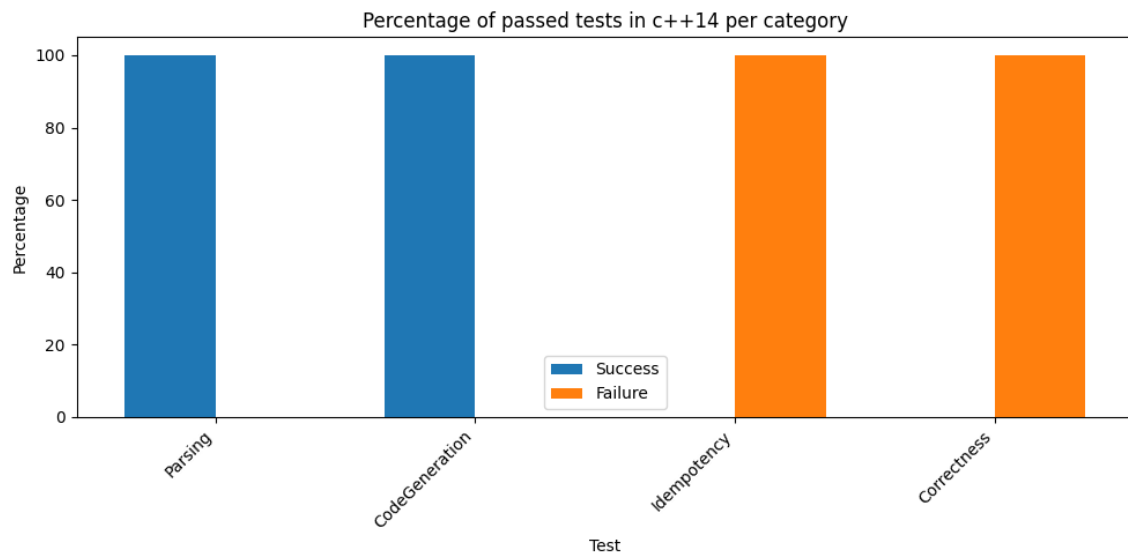
Figure 3: Percentage of passed tests in c++14

4 C++17

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Bindingdecl	0.01	True	0.01	True	0	False	0	False
Cxxdeductionguidedecl	0	False	0	N/A	0	N/A	0	N/A
Decompositiondecl	0.02	True	0.02	True	0	False	0	False
Usingpackdecl	0.02	True	0.02	True	0	False	0	False
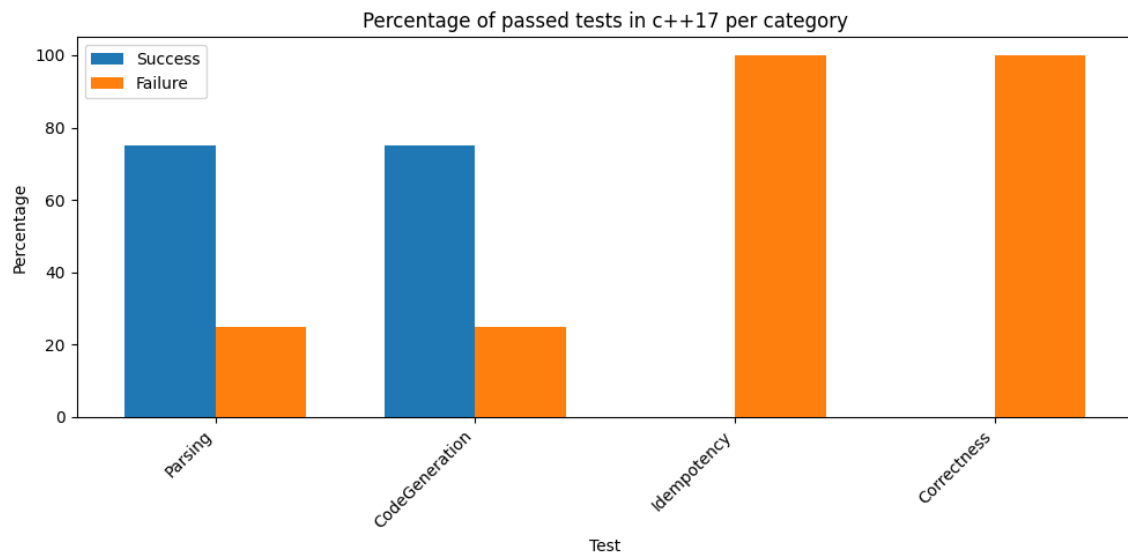
Figure 4: Percentage of passed tests in c++17

5   C++20

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Cxxrewrittenbinaryoperator	0.01	True	0.02	True	0	False	0	False
Coawaitexpr	0	False	0	N/A	0	N/A	0	N/A
Conceptdecl	0	False	0	N/A	0	N/A	0	N/A
Conceptspecializationexpr	0	False	0	N/A	0	N/A	0	N/A
Coroutinebodystmt	0	False	0	N/A	0	N/A	0	N/A
Coroutinesuspendexpr	0	False	0	N/A	0	N/A	0	N/A
Coyieldexpr	0	False	0	N/A	0	N/A	0	N/A
Dependentcoawaitexpr	0	False	0	N/A	0	N/A	0	N/A
Requiresexpr	0	False	0	N/A	0	N/A	0	N/A
Usingenumdecl	0	False	0	N/A	0	N/A	0	N/A
Char8_t	0	False	0	N/A	0	N/A	0	N/A
Co_await_nf	0	False	0	N/A	0	N/A	0	N/A
Co_return_nf	0	False	0	N/A	0	N/A	0	N/A
Co_yield	0	False	0	N/A	0	N/A	0	N/A
Concept	0	False	0	N/A	0	N/A	0	N/A
Consteval	0	False	0	N/A	0	N/A	0	N/A
Constinit	0	False	0	N/A	0	N/A	0	N/A
Export	0	False	0	N/A	0	N/A	0	N/A
Requires	0	False	0	N/A	0	N/A	0	N/A
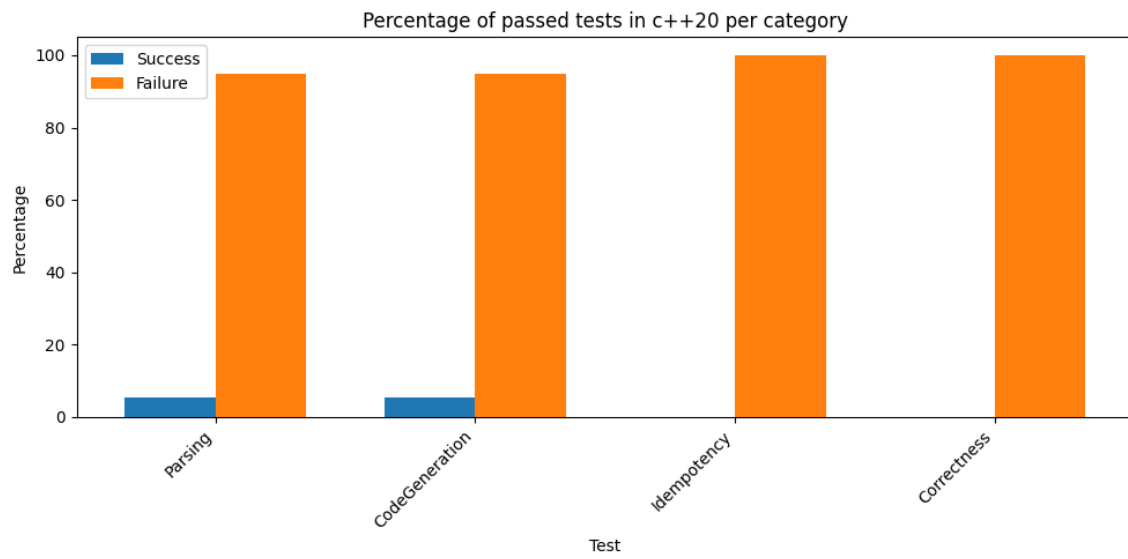
Figure 5: Percentage of passed tests in c++20

6   C89

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Addrlabelexpr	0.01	True	0.01	True	0	False	0	False
Arrayinitindexexpr	0.01	True	0.02	True	0	False	0	False
Arraysubscriptexpr	0	False	0	N/A	0	N/A	0	N/A
Binaryconditionaloperator	0.01	True	0.02	True	0	False	0	False
Binaryoperator	0.01	True	0.01	True	0	False	0	False
Cstylecastexpr	0.01	True	0.01	True	0	False	0	False
Callexpr	0.01	True	0.01	True	0	False	0	False
Characterliteral	0.01	True	0.01	True	0	False	0	False
Compoundassignoperator	0.01	True	0.01	True	0	False	0	False
Compoundliteralexpr	0.01	True	0.01	True	0	False	0	False
Conditionaloperator	0.01	True	0.02	True	0	False	0	False
Declrefexpr	0.01	True	0.01	True	0	False	0	False
Enumconstantdecl	0.01	True	0.01	True	0	False	0	False
Extvectorelementexpr	0.01	True	0.02	True	0	False	0	False
Floatingliteral	0.01	True	0.01	True	0	False	0	False
Imaginaryliteral	0	False	0	N/A	0	N/A	0	N/A
Implicitvalueinitexpr	0.01	True	0.02	True	0	False	0	False
Indirectfielddecl	0.01	True	0.01	True	0	False	0	False
Indirectgotostmt	0.01	True	0.01	True	0	False	0	False
Initlistexpr	0.01	True	0.02	True	0	False	0	False
Integerliteral	0.01	True	0.01	True	0	False	0	False
Matrixsubscriptexpr	0.01	True	0.02	True	0	False	0	False
Memberexpr	0.01	True	0.02	True	0	False	0	False
Noinitexpr	0.01	True	0.01	True	0	False	0	False
Parenexpr	0.01	True	0.01	True	0	False	0	False
Stringliteral	0.01	True	0.01	True	0	False	0	False
Unaryexprortypetraitexpr	0.01	True	0.01	True	0	False	0	False
Unaryoperator	0.01	True	0.01	True	0	False	0	False
Asm_func_decl	0.01	True	0.01	True	0	False	0	False
Auto_var_decl	0.01	True	0.01	True	0	False	0	False
Char_var_decl	0.01	True	0.01	True	0	False	0	False
Const_var_decl	0.01	True	0.01	True	0	False	0	False
Do_while	0.01	True	0.01	True	0	False	0	False
Double_var_decl	0.01	True	0.01	True	0	False	0	False
Enum_decl	0.01	True	0.01	True	0	False	0	False
Extern_var_decl	0.01	True	0.01	True	0	False	0	False
Float_var_decl	0.01	True	0.01	True	0	False	0	False
For_loop	0.01	True	0.02	True	0	False	0	False
For_loop_break	0.01	True	0.01	True	0	False	0	False
For_loop_continue	0.01	True	0.02	True	0	False	0	False
Goto	0	False	0	N/A	0	N/A	0	N/A
If	0.01	True	0.02	True	0	False	0	False

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
If_else	0.01	True	0.02	True	0	False	0	False
Int_var_decl	0.01	True	0.01	True	0	False	0	False
Long_var_decl	0.01	True	0.01	True	0	False	0	False
Named_union_decl	0.01	True	0.01	True	0	False	0	False
Prep_define	0.02	True	0.02	True	0	False	0	False
Prep_defined	0.01	True	0.02	True	0	False	0	False
Prep_elif	0.01	True	0.01	True	0	False	0	False
Prep_else	0.01	True	0.02	True	0	False	0	False
Prep_endif	0.01	True	0.02	True	0	False	0	False
Prep_error	0.01	True	0.01	True	0	False	0	False
Prep_if	0.01	True	0.01	True	0	False	0	False
Prep_ifdef	0.01	True	0.01	True	0	False	0	False
Prep_ifndef	0.01	True	0.01	True	0	False	0	False
Prep_include	0.02	True	0.02	True	0	False	0	False
Prep_line	0.01	True	0.01	True	0	False	0	False
Prep_pragma	0.01	True	0.01	True	0	False	0	False
Prep_undef	0.02	True	0.02	True	0	False	0	False
Register_var_decl	0.02	True	0.02	True	0	False	0	False
Return_stmt	0.01	True	0.01	True	0	False	0	False
Short_var_decl	0.01	True	0.01	True	0	False	0	False
Signed_var_decl	0.01	True	0.01	True	0	False	0	False
Sizeof	0.02	True	0.02	True	0	False	0	False
Static_var_decl	0.01	True	0.01	True	0	False	0	False
Struct_decl	0.02	True	0.02	True	0	False	0	False
Switch_case	0.01	True	0.02	True	0	False	0	False
Switch_default	0.01	True	0.02	True	0	False	0	False
Typedef_decl	0.01	True	0.01	True	0	False	0	False
Unnamed_union_decl	0	False	0	N/A	0	N/A	0	N/A
Unsigned_var_decl	0.01	True	0.01	True	0	False	0	False
Void_func_decl	0.01	True	0.01	True	0	False	0	False
Volatile_var_decl	0.01	True	0.01	True	0	False	0	False
While_stmt	0.01	True	0.02	True	0	False	0	False
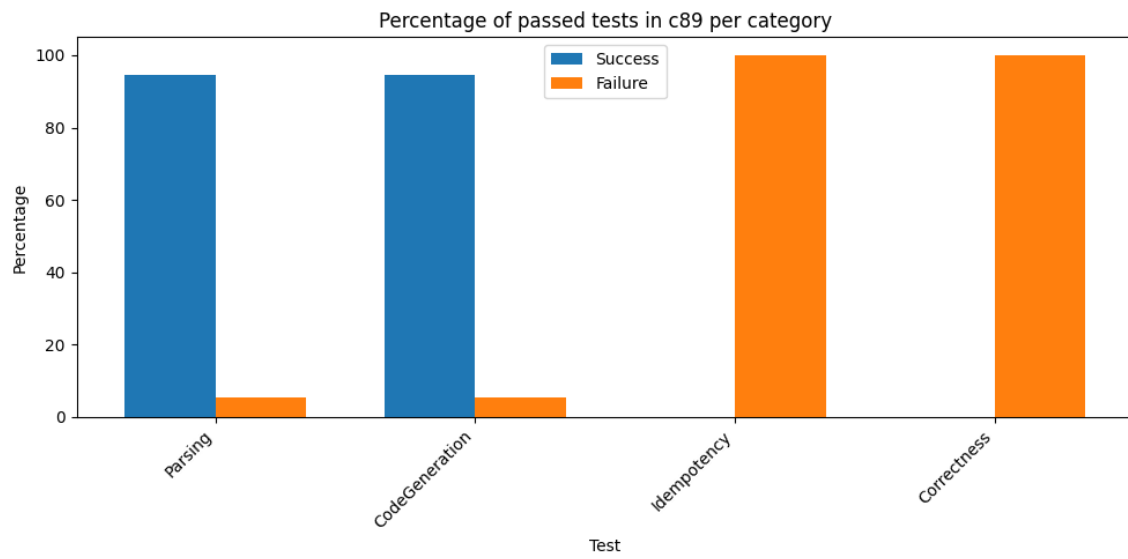
Figure 6: Percentage of passed tests in c89

7 C99

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
_bool_var_decl	0	False	0	N/A	0	N/A	0	N/A
_complex_var_decl	0.31	True	0.31	True	0	False	0	False
_imaginary	0	False	0	N/A	0	N/A	0	N/A
_pragma	0.01	True	0.02	True	0	False	0	False
Inline_func_decl	0.01	True	0.02	True	0	False	0	False
Restrict	0	False	0	N/A	0	N/A	0	N/A
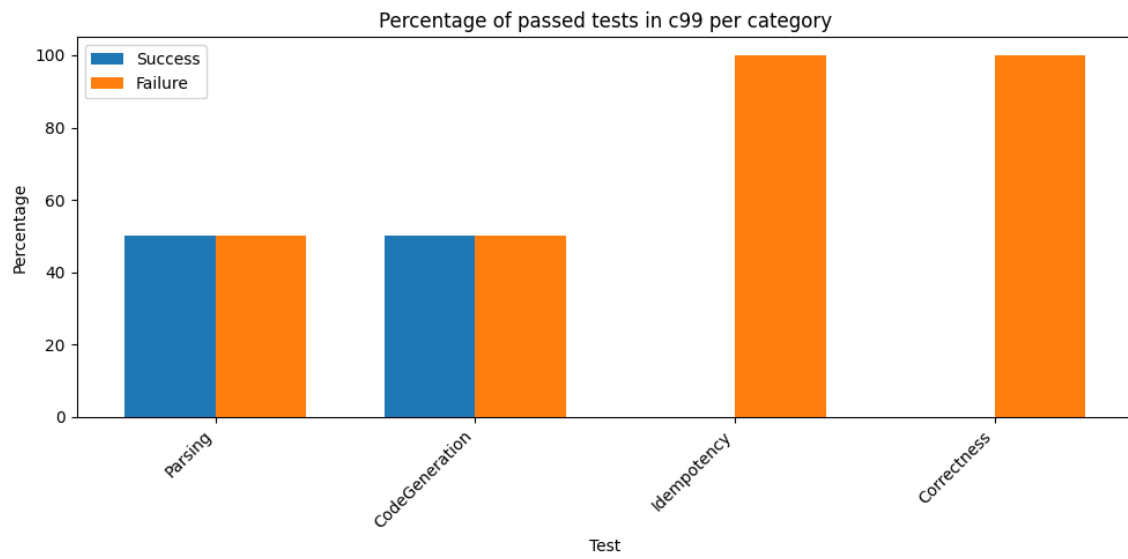
Figure 7: Percentage of passed tests in c99

8   C11

	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
Genericselectionexpr	0.02	True	0.02	True	0	False	0	False
_alignas	0.02	True	0.02	True	0	False	0	False
_alignof	0.04	True	0.04	True	0	False	0	False
_atomic	0.02	True	0.02	True	0	False	0	False
_generic	0.02	True	0.03	True	0	False	0	False
_noreturn	0.08	True	0.09	True	0	False	0	False
_static_assert	0.05	True	0.06	True	0	False	0	False
_thread_local	0.09	True	0.1	True	0	False	0	False
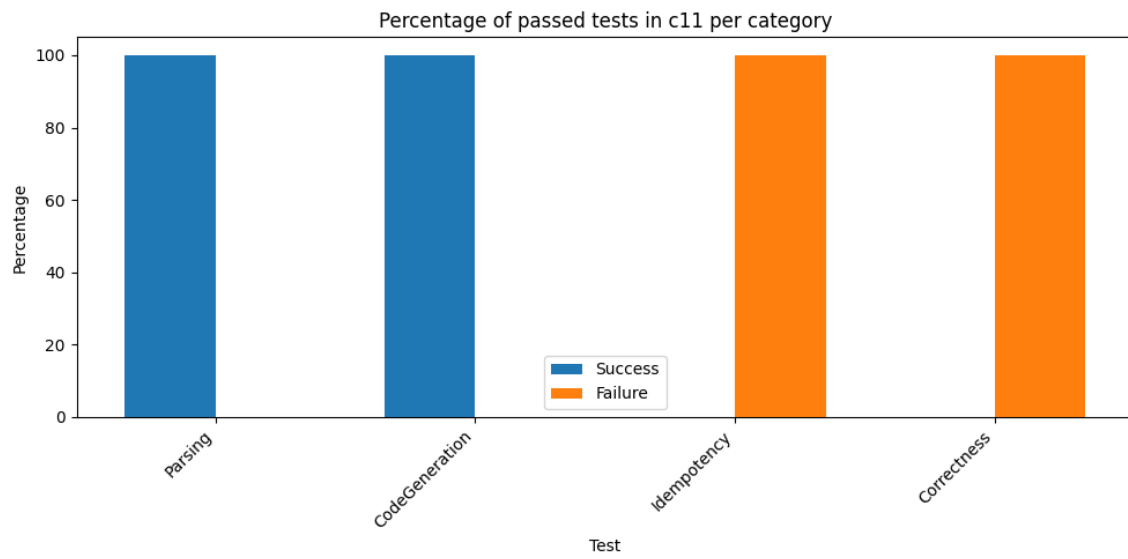
Figure 8: Percentage of passed tests in c11

9   C23

|	Parsing		Code Generation		Idempotency		Correctness	
	Time	Success	Time	Success	Tries	Success	Time	Success
_bitint	0	False	0	N/A	0	N/A	0	N/A
_decimal128	0	False	0	N/A	0	N/A	0	N/A
_decimal32	0	False	0	N/A	0	N/A	0	N/A
_decimal64	0	False	0	N/A	0	N/A	0	N/A
Alignas	0.01	True	0.02	True	0	False	0	False
Alignof	0	False	0	N/A	0	N/A	0	N/A
Bool	0.01	True	0.01	True	0	False	0	False
Constexpr	0.01	True	0.01	True	0	False	0	False
False	0.01	True	0.02	True	0	False	0	False
Nullptr	0.02	True	0.03	True	0	False	0	False
Prep __has_include	0.04	True	0.04	True	0	False	0	False
Prep ___has_c_attribute	0.01	True	0.01	True	0	False	0	False
Prep ___has_embed	0.05	True	0.05	True	0	False	0	False
Prep_elifdef	0	False	0	N/A	0	N/A	0	N/A
Prep_elifndef	0.02	True	0.03	True	0	False	0	False
Prep_embed	0	False	0	N/A	0	N/A	0	N/A
Prep_warning	0.02	True	0.02	True	0	False	0	False
Static_assert	0.02	True	0.02	True	0	False	0	False
Thread_local	0.01	True	0.01	True	0	False	0	False
True	0.01	True	0.01	True	0	False	0	False
Typeof	0.01	True	0.01	True	0	False	0	False
Typeof_unqual	0	False	0	N/A	0	N/A	0	N/A
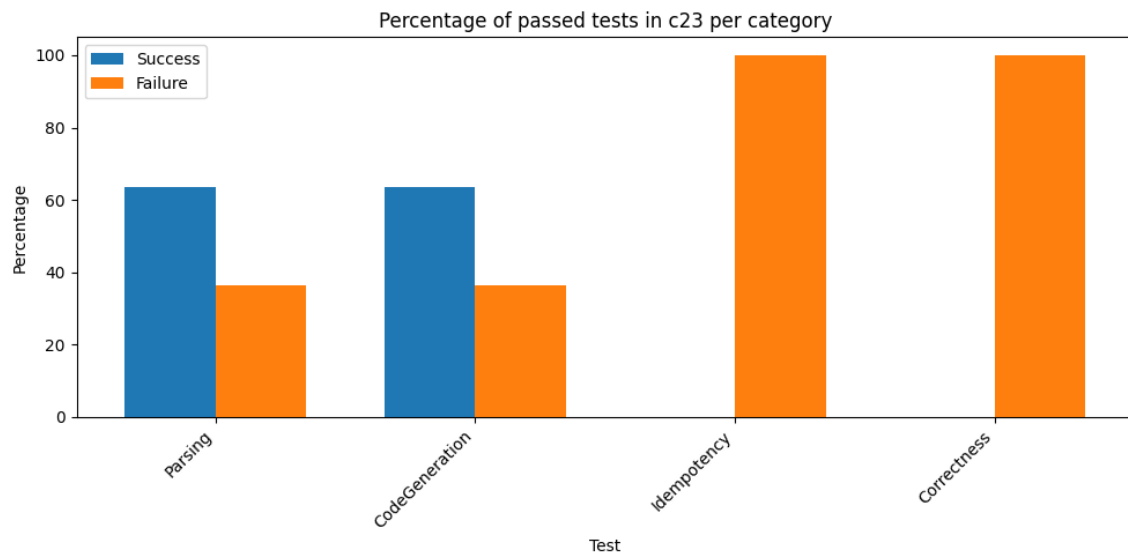
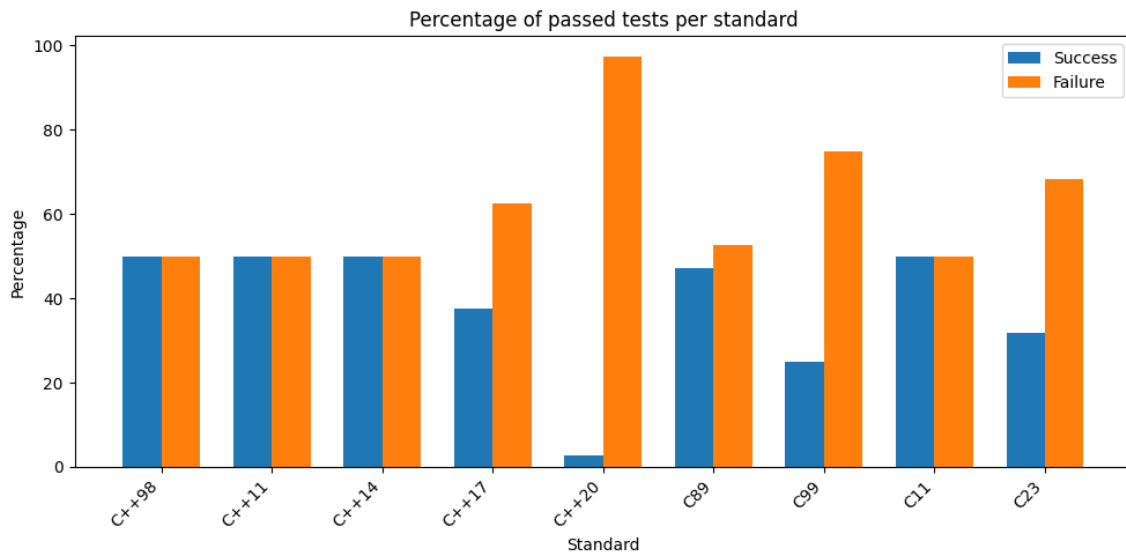Figure 9: Percentage of passed tests in c23

10 Percentages

Percentage of passed tests: 48.39 %

Figure 10: Percentage of passed tests per standard