

MiniJava Compiler Evaluation

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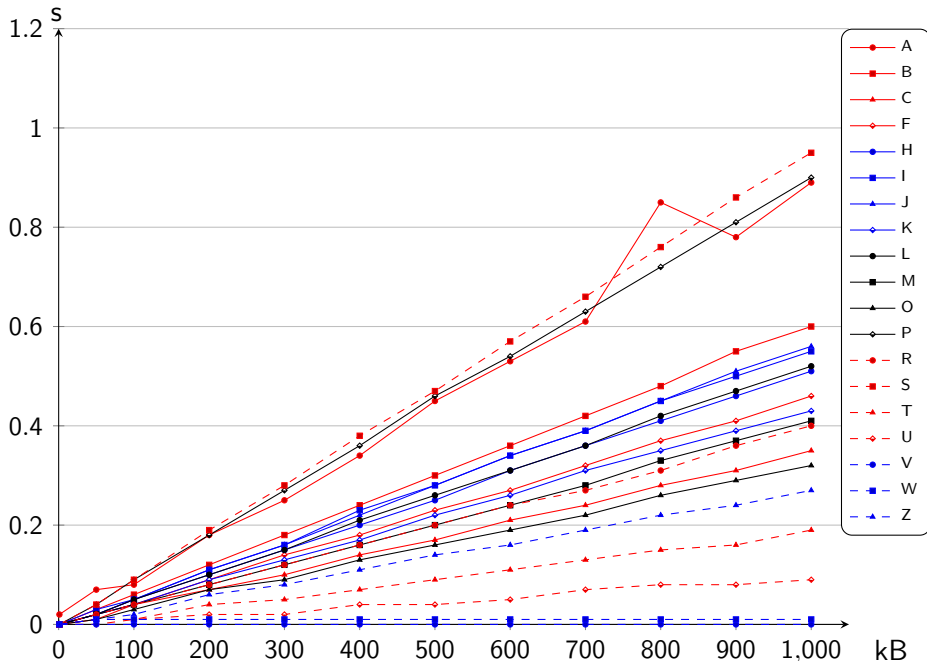
January 19, 2012

Correctness Tests: Lexer

| test case | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | Z |
|----------------------------------|---------|---------|--------|---------|---------|--------|---|----------|---------|--------|--------|--------|---------|--------|--------|---------|---|---------|---------|--------|-------|--------|--------|--------|
| all_chars.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | X | 255 | F | |
| all_tokens.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | X | 255 | X | |
| big_number.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | I | |
| Bottles.java | | | | - | - | | - | | | X | X | | | - | | F | - | | | | | 255 | X | |
| char_00.java | | | | - | - | | - | | | | E | | | - | | - | - | | | | E | E | 255 | |
| char_0D.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | F | |
| char_FF.java | | | | - | - | E | - | | | | E | | | - | | - | - | | | | E | E | 255 | E |
| char_invalid.java | | | | - | - | | - | | | | E | | | - | | - | - | | | | E | E | 255 | |
| comment_2_in_1_line.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| comment_at_end.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| comment_at_start.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| comment_minimal.java | | | | - | - | S | - | | | X | F | | | - | | F | - | | | | | 255 | | |
| comment_multi-line.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| comment_only.java | | | | - | - | S | - | | | X | F | | | - | | F | - | | | | | 255 | | |
| comment_terminated.java | | | | - | - | | - | | | | E | | | - | 255 | - | - | | | | | I | 255 | I |
| comment_with_inv_char.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| comment_with_slash.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | F | 255 | | |
| double_slash.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | X | 255 | X | |
| empty.java | | | | - | - | S | - | | | X | F | | | - | | F | - | | | | | 255 | | |
| exercise_example.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| Fac.java | | | | - | - | | - | | | X | X | | | - | | F | - | | | | | 255 | X | |
| Fib.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | X | |
| GCD.java | | | | - | - | | - | | | X | X | | | - | | F | - | | | | | 255 | X | |
| HelloSomething.java | | | | - | - | | - | | | X | X | | | - | | F | - | | | | | 255 | X | |
| identifiers.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | I | |
| long_ident.java | | | | - | - | | - | | | X | S | X | | - | | F | - | | | | | 255 | I | |
| MinInt.java | | | | - | - | | - | | | X | X | | | - | | F | - | | | | | 255 | | |
| mixed_eols.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | F | |
| no_eol.java | | | | - | - | X | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| numbers.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| token_pairs.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | F | F | 255 | F |
| tokens_seperated_by_comment.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| whitespace.java | | | | - | - | | - | | | X | F | X | | - | | F | - | | | | | 255 | | |
| passed (of 33) | 33 | 33 | 33 | 0 | 0 | 28 | 0 | 33 | 33 | 4 | 9 | 3 | 33 | 0 | 32 | 4 | 0 | 33 | 33 | 28 | 25 | 0 | 17 | 33 |
| size (bytes) | 166,450 | 117,275 | 79,629 | 125,613 | 113,562 | 36,397 | 0 | 6728,640 | 136,664 | 51,767 | 63,157 | 18,853 | 208,079 | 37,488 | 16,541 | 139,537 | 0 | 419,968 | 302,567 | 60,413 | 7,962 | 12,578 | 54,768 | 46,121 |

X wrong output
E error not detected
F failed with error on valid input
S segfault
A assertion/abort
I infinite loop

Throughput Test: Lexer



Correctness Tests: Parser

| testcase | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | Z |
|------------------------------|---------|---------|--------|---------|---------|--------|---|----------|---------|--------|--------|--------|---------|--------|--------|---------|---|---------|---------|--------|-------|--------|--------|--------|
| all_operators.java | | | | - | - | - | | | | F | F | | | | | - | S | | | | 44 | 255 | | |
| all_statements.java | | | | - | - | - | | | | F | | | | | | F | - | S | | F | 44 | 255 | | |
| bad_body.java | | | | - | - | - | | | | | | E | | | | E | | | | | 44 | 255 | E | |
| Bottles.java | | | | - | - | - | | | | F | F | | | | | - | S | | | | 44 | 255 | | |
| decl_without_declarator.java | | | | - | - | - | | | | | | | | | | E | | | | | 44 | 255 | E | |
| deep_paren.java | | | | - | - | - | | | | F | | | | | | F | - | S | | | 44 | 255 | | |
| double_comma.java | | | | - | - | - | | | | | E | | | | | E | | | | | 44 | 255 | E | |
| empty_block.java | | | | - | - | - | | | | F | F | | | | | F | - | S | | | 44 | 255 | | |
| empty_class.java | | | | - | - | - | | | | | F | | | | | F | - | S | | | 44 | 255 | | |
| empty_statements.java | | | | - | - | - | | | | F | | | | | | F | - | S | | | 44 | 255 | | |
| extraneous_comma.java | | | | - | - | - | | | | | E | | | | | E | - | | | | 44 | 255 | E | |
| Fac.java | | | | - | - | - | | | | F | F | | | | | F | - | S | | | 44 | 255 | | |
| Fib.java | | | | - | - | F | | | | F | F | F | | | | F | - | S | | | 44 | 255 | | |
| GCD.java | | | | - | - | - | | | | F | F | | | | | F | - | S | | | 44 | 255 | | |
| HelloSomething.java | | | | - | - | - | | | | | | | | | | F | - | S | | | 44 | 255 | | |
| if_if_else_else.java | | | | - | - | - | | | | F | F | | | | | F | - | S | | | 44 | 255 | | |
| keyword_var.java | | | | - | - | - | | | | | | | | | | E | | | | | 44 | 255 | E | |
| LinkedList.java | | | | - | - | F | | | | F | F | | | | | F | - | S | | F | 44 | 255 | | |
| long_lhs.java | | | | - | - | F | | | | F | F | | | | | F | - | S | | F | 44 | 255 | | |
| misc.java | | | | - | - | - | | | | F | F | | | | | F | - | S | | | 44 | 255 | | |
| missing_brace2.java | | | | - | - | - | | | | | | E | | | | E | - | | | | 44 | 255 | E | |
| missing_brace.java | | | | - | - | - | | | | | | | | | | S | - | | | | 44 | 255 | E | |
| missing_comma.java | | | | - | - | E | | | | | | | | | | E | - | | | | 44 | 255 | E | |
| missing_init.java | | | | - | - | E | | | | | | E | | | | E | - | | | | 44 | 255 | E | |
| missing_operand.java | | | | - | - | E | | | | | | | | | | E | - | | | | 44 | 255 | E | |
| missing_param_name.java | | | | - | - | - | | | | | E | | | | | E | - | | | | 44 | 255 | E | |
| missing_public.java | | | | - | - | - | | | | | E | | | | | E | - | | | | 44 | 255 | E | |
| multiple_classes.java | | | | - | - | - | | | | | | | | | | F | - | S | | | 44 | 255 | | |
| multiple_comma.java | | | | - | - | - | | | | | | E | | | | S | - | | | | 44 | 255 | E | |
| non_block_declaration.java | | | | - | - | - | | | | | | | | | | E | - | | | | 44 | 255 | E | |
| OP_Triples_All.java | | | | - | - | - | | F | | I | F | | | | | F | - | I | - | I | A | 44 | 255 | |
| OP_Triples.java | | | | - | - | - | | F | | F | F | | | | | F | - | S | | | 44 | 255 | | |
| other_main.java | | | | - | - | F | | | | F | F | | | | | F | - | F | | | 44 | 255 | | |
| out_java | | | | - | - | - | | | | | | | | | | E | - | | | | 44 | 255 | E | |
| semicolon_in_class.java | | | | - | - | - | | | | | | E | | | | E | - | | | | 44 | 255 | E | |
| split_operator.java | | | | - | - | E | | | | E | E | | | | | E | - | | | | 44 | 255 | E | |
| system.java | | | | - | - | - | | | | F | F | | | | | F | - | S | | F | 44 | 255 | | |
| System_out_println_x.java | | | | - | - | F | | | | F | F | | | | | E | - | S | | F | 44 | 255 | | |
| passed (of 38) | 38 | 38 | 38 | 0 | 0 | 29 | 0 | 38 | 36 | 20 | 30 | 20 | 38 | 0 | 24 | 4 | 0 | 17 | 38 | 32 | 0 | 0 | 21 | 38 |
| size (bytes) | 166,490 | 117,275 | 79,626 | 125,613 | 113,562 | 36,397 | 0 | 6728,640 | 136,664 | 51,767 | 63,157 | 18,853 | 208,079 | 37,488 | 16,541 | 136,537 | 0 | 419,968 | 302,567 | 60,413 | 7,962 | 12,578 | 54,768 | 46,121 |

X wrong output
 E error not detected
 F failed with error on valid input
 S segfault
 A assertion/abort
 I infinite loop

Correctness Tests: Pretty Printer, fully parenthesized

| test case | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | Z |
|---------------------------|---------|---------|--------|---------|---------|--------|---|----------|---------|--------|--------|--------|---------|--------|--------|---------|---|---------|---------|--------|-------|--------|--------|--------|
| all_operators.java | | S | | - | - | X | - | | X | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| all_statements.java | | S | | - | - | X | - | | X | X | X | F | | - | X | F | - | S | S | F | 44 | 255 | X | |
| associativity.java | | S | X | - | - | X | - | | X | X | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| Bottles.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| compare.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| deep_paren.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| empty_class.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| empty_method.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| example_full.java | | S | | - | - | X | - | F | | X | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| example.java | | S | | - | - | X | - | | | X | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| example_min.java | | S | | - | - | X | - | | | X | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| Fac.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| Fib.java | | S | | - | - | X | - | | X | X | F | F | | - | X | F | - | S | A | X | 44 | 255 | X | |
| field_accesses.java | | S | | - | - | X | - | | X | X | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| GCD2.java | | S | | - | - | X | - | | X | X | X | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| GCD.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| HelloSomething.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| if_cascade.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| if_if_else_else.java | | S | | - | - | X | - | | | X | X | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| if_if_else.java | | S | | - | - | X | - | | | X | X | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| multi_assign.java | | S | X | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| new.java | | S | | - | - | X | - | | | X | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| precedence.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| return_expr.java | | S | | - | - | X | - | | | X | | F | | - | X | F | - | S | S | X | 44 | 255 | X | |
| System_out_println_x.java | | S | | - | - | X | - | | X | X | F | F | | - | X | F | - | S | A | F | 44 | 255 | X | |
| passed (of 25) | 25 | 0 | 23 | 0 | 0 | 0 | 0 | 24 | 18 | 0 | 14 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| size (bytes) | 166,450 | 117,275 | 79,628 | 125,613 | 113,562 | 36,397 | 0 | 6728,640 | 136,664 | 51,767 | 63,157 | 18,853 | 208,079 | 37,488 | 16,541 | 139,537 | 0 | 419,968 | 302,567 | 60,413 | 7,962 | 12,578 | 54,768 | 46,121 |

X wrong output
 E error not detected
 F failed with error on valid input
 S segfault
 A assertion/abort
 I infinite loop

Correctness Tests: Pretty Printer, minimally parenthesized

| test case | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | Z |
|-----------------------|---------|---------|--------|---------|---------|--------|---|----------|---------|--------|--------|--------|---------|--------|--------|---------|---|---------|---------|--------|-------|--------|--------|--------|
| assign_in_expr.java | | S | | - | - | X | - | | | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | | |
| boolean.java | | S | X | - | - | X | - | | | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | | |
| compare.java | | S | | - | - | X | - | | | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | | |
| example_full.java | | S | | - | - | X | - | F | | F | F | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| example.java | | S | | - | - | X | - | | | F | F | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| example_min.java | | S | | - | - | X | - | | | F | F | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| explicit_braces.java | | S | X | - | - | X | - | | X | X | X | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| field_accesses.java | | S | | - | - | X | - | | | F | F | F | - | X | F | - | S | S | F | 44 | 255 | X | | |
| forced_assoc.java | | S | | - | - | X | - | | X | F | X | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| many_parentheses.java | X | S | X | - | - | X | - | | | F | F | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| mixed_precedence.java | | S | | - | - | X | - | | X | F | F | | - | X | F | - | S | S | X | 44 | 255 | X | | |
| multi_assign.java | | S | X | - | - | X | - | | | F | F | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| new.java | | S | | - | - | X | - | | | F | F | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| no_parentheses.java | | S | | - | - | X | - | | | F | F | F | - | X | F | - | S | S | X | 44 | 255 | X | | |
| passed (of 14) | 13 | 0 | 10 | 0 | 0 | 0 | 0 | 13 | 11 | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| size (bytes) | 166,450 | 117,275 | 79,629 | 125,613 | 113,562 | 36,397 | 0 | 6728,640 | 136,664 | 51,767 | 63,157 | 18,853 | 208,079 | 37,488 | 16,541 | 139,537 | 0 | 419,968 | 302,567 | 60,413 | 7,962 | 12,578 | 54,768 | 46,121 |

X wrong output
 E error not detected
 F failed with error on valid input
 S segfault
 A assertion/abort
 I infinite loop

Correctness Tests: Static Semantics

| testcase | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | Z |
|---|---------|---------|--------|---------|---------|--------|---|----------|---------|--------|--------|--------|---------|--------|--------|---------|---|---------|---------|--------|-------|--------|--------|--------|
| b_cyclic_inheritance_conspiracy.java | | | E | - | - | E | - | | | E | | | | - | E | - | | | | | 44 | 255 | E | E |
| b_duplicate_class.java | | | E | - | - | E | - | | | E | | | | - | E | - | | | | | E | 44 | 255 | E |
| b_duplicate_field.java | | | E | - | - | E | - | | | E | | | | - | E | - | | | | | E | 44 | 255 | E |
| b_duplicate_method.java | | | E | - | - | E | - | | | E | | | | - | E | - | | | | | E | 44 | 255 | E |
| b_duplicate_var_inner_blocks.java | | | E | - | - | E | - | | E | E | | | | - | E | - | | | | | E | 44 | 255 | E |
| b_duplicate_var.java | | | E | - | - | E | - | | | E | | | | - | E | - | | | | | E | 44 | 255 | E |
| b_empty.java | | | E | - | - | E | - | | E | E | | | | - | E | - | | | S | | E | 44 | 255 | E |
| b_missing_return_if.java | | | E | - | - | E | - | | | E | E | | | - | E | - | | | | | E | 44 | 255 | E |
| b_missing_return_simple.java | | | E | - | - | E | - | | | E | E | | | - | E | - | | | | | E | 44 | 255 | E |
| b_overload.java | | | E | - | - | E | - | | | E | E | | | - | E | - | | | | | E | 44 | 255 | E |
| b_parenthesized_expression_statement.java | | | E | - | - | E | - | | | E | E | | | - | E | - | S | | | | E | 44 | 255 | E |
| b_same_name_param_var.java | | | E | - | - | E | - | | | E | E | | | - | E | - | | | | | E | 44 | 255 | E |
| b_tebbi_test.java | | | E | - | - | E | - | | E | | | | | - | E | - | | | | | | 255 | | |
| b_unreachable_after_if_cascade.java | | | E | - | - | E | - | | | E | E | | | - | E | - | | | | | | 44 | 255 | E |
| b_unreachable_after_if_else.java | | | E | - | - | E | - | | | E | E | | | - | E | - | | | | | | 44 | 255 | E |
| b_unreachable_simple.java | | | E | - | - | E | - | | | E | E | | | - | E | - | | | | | | 44 | 255 | E |
| b_wrong_paren_System_out_println.java | | | E | - | - | E | - | | | E | E | | | - | E | - | | S | | | E | 44 | 255 | E |
| g_assignments.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | E | 44 | 255 | E |
| g_compare_refs.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | E | 44 | 255 | |
| g_comparisons.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | E | 44 | 255 | |
| g_expression_statements.java | | S | | - | - | | - | | | | F | F | | | | F | - | F | S | | E | 44 | 255 | |
| g_hidden_superclass_field.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | F | 44 | 255 | |
| g_if_return_else_return.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | E | 44 | 255 | |
| g_local_var_after_field_access.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | E | 44 | 255 | |
| g_overwrite.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | A | | A | F | 44 | 255 |
| g_parallel_var_decl.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | E | 44 | 255 | |
| g_reachable_after_if_cascade.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | F | 44 | 255 | |
| g_reachable_after_if.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | F | 44 | 255 | |
| g_reachable_after_while.java | | S | | - | - | | - | | F | | F | | | | | F | - | S | S | | F | 44 | 255 | |
| g_return_superclass.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | E | 44 | 255 | |
| g_same_name_class_field_method_param.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | E | 44 | 255 | |
| g_System.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | S | | F | 44 | 255 | |
| g_System_out_println_x.java | | S | | - | - | | - | | | | F | F | | | | F | - | S | A | | F | 44 | 255 | |
| passed (of 33) | 33 | 17 | 17 | 0 | 0 | 16 | 0 | 33 | 29 | 16 | 20 | 17 | 33 | 0 | 17 | 17 | 0 | 15 | 17 | 14 | 1 | 0 | 17 | 26 |
| size (bytes) | 166,450 | 117,275 | 79,628 | 125,613 | 113,562 | 36,397 | 0 | 6728,640 | 136,664 | 51,767 | 63,157 | 18,853 | 208,079 | 37,488 | 16,541 | 139,537 | 0 | 419,968 | 302,567 | 60,413 | 7,962 | 12,578 | 54,768 | 46,121 |

X wrong output
 E error not detected
 F failed with error on valid input

S segfault
 A assertion/abort
 I infinite loop