

ユーザーからみた Lrama

After RubyKaigi 2024
LR Parser Night w/ Asakusa.rb

S.H.

自己紹介

- S.H.
- ESM構文解析研究部員
- Hamada.rb
- Ruby Hacking Challenge in Hamada.rb
- Haloはいいぞ



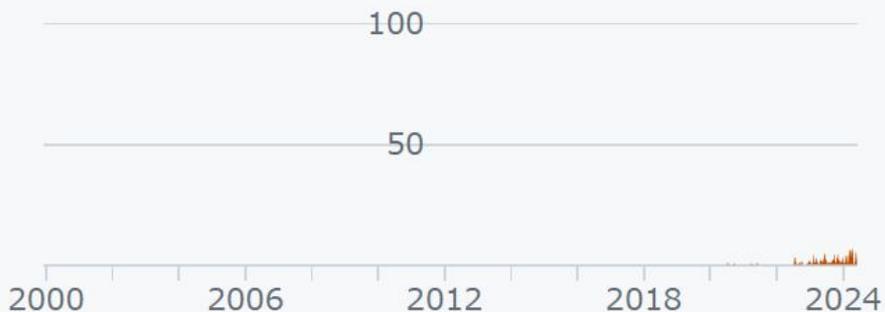
Ruby コントリビューター

ruby/rubyのコントリビューションランキング



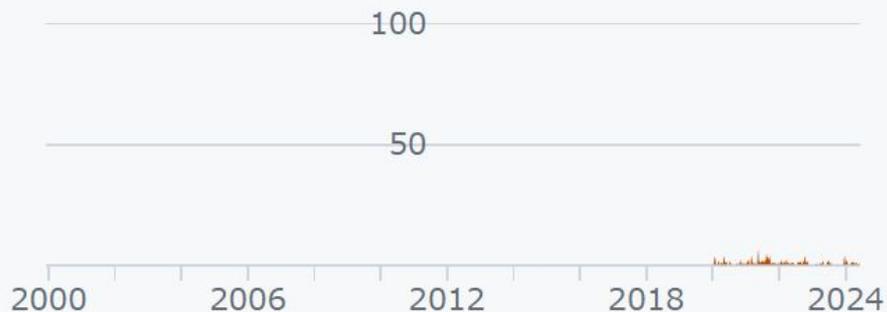
tompng
172 commits

#43



S-H-GAMELINKS
167 commits

#44

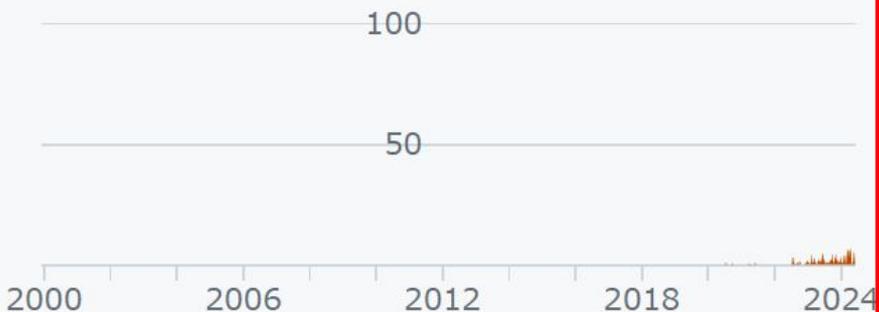


ruby/rubyのコントリビューションランキング



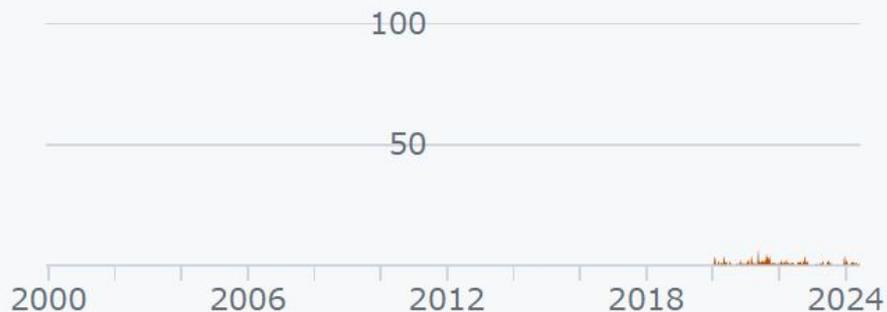
tompng
172 commits

#47



S-H-GAMELINKS
167 commits

#44



parse.y コントリビューター

Introduce NODE_ENCODING #9731

Merged

nobu merged 1 commit into `ruby:master` from `S-H-GAMELINKS:introduce/node-encoding` on Jan 27

Conversation 2

Commits 1

Checks 98

Files changed 7



S-H-GAMELINKS commented on Jan 27 • edited by nobu

Contributor

`__ENCODING__` was managed by `NODE_LIT` with Encoding object.

Introduce `NODE_ENCODING` for

1. `__ENCODING__` is detectable from AST Node.
2. Reduce dependency Ruby object for parse.y



Introduce NODE_ENCODING

Verified ✓ d311131

parse.y を触るユーザー

Lrama のユーザー

ユーザーからみた Lrama

After RubyKaigi 2024
LR Parser Night w/ Asakusa.rb

S.H.

Lrama の紹介

いらないうですよね？

RubyKaigi 2024



Yuichiro Kaneko

  @spikeolaf

The author of [Lrama](#) LALR parser generator. Ruby committer.

JA

The grand strategy of Ruby Parser

In RubyKaigi 2023, I presented how to solve three big Ruby parser problems. The solutions were feasible, however they were just tactics. This talk will provide the grand strategy of Ruby Parser.



Yudai Takada

  @yдах_

The committer of [ruby/irama](#). Co-Founder of [Kyobashi.rb](#). A Software engineer at ANDPAD, Inc.

JA

Does Ruby Parser dream of highly expressive grammar?

The ruby parser grammar file has been subjected to many complicated workarounds due to the limitations by Bison. You've probably thought at least once or twice that if richer DSL support would make grammar files more readable.

For example, pattern involving multiple repetitions separated by commas, like method call arguments, are quite common. It is only natural to desire a concise way to express them



Junichi Kobayashi

  @junk0612

Working as a Rails programmer at ESM, Inc., with a keen interest in Ruby parsers and their related technologies.

JA

From LALR to IELR: A Lrama's Next Step

In `parse.y`, there is a variable that represents the state of the Lexer, based on the idea that the Parser and the Lexer can be separated. However, in reality, the state of Parser and Lexer are shared and cannot be said to be separated. Also, the Lexer state is manually managed, but historical history has clouded the view, and additions and modifications must be done with care. With the replacement of the parser generator from Bison to Lrama, the time has come to attack `parse.y` from the parser generator side, and Lrama is trying to solve this

みんな聴いてるはず

割愛

Lrama の嬉しいところ

3

点

1

Named references

Implement named references #41

<> Code ▾

Merged yui-knk merged 7 commits into ruby:master from junk0612:implement-named-references on Jun 13, 2023

Conversation 6 Commits 7 Checks 9 Files changed 6

+270 -25



junk0612 commented on Jun 12, 2023

Collaborator ⋮

Summary

In this pull request, I have implemented the [Named References](#) concept from bison. By merging this pull request, it will be possible to refer to the value by its symbol in the rule or its alias from within the action.

Changes made

- Detect and tokenize the named references declaration
- Make references from named references in actions
- Change some grammar parameters
 - Add alias to Token class
 - Rename number in the Reference class to value because there is now a case where a string is assigned in addition to a number.
- Add a test case

Reviewers

yui-knk ✓

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

Successfully merging this pull request may close these issues.

Add a lexer test

7830000

Refactor using named references #8510

<> Code ▾

Merged nobu merged 7 commits into `ruby:master` from `nobu:named-references` on Sep 25, 2023

Conversation 0

Commits 7

Checks 92

Files changed 2

+200 -193 ■ ■ ■ ■



nobu commented on Sep 25, 2023

Member ⋮

No description provided.



Reviewers

No reviews

Assignees

No one assigned

Labels

None yet

Milestone

No milestone

Notifications

Customize

Unsubscribe

You're receiving notifications because you're watching this repository.

nobu added 7 commits 9 months ago

- ripper: Support named references in the DSL
- Name midrules in complex rules
- Remove `escape_Qundef` ...
- Reduce stack usage in `string_content`
- Split the build of `RESBODY` nodes
- Extract class/module context checks
- Use named references for method/class/module definitions

- Verified 7611de6
- Verified f832655
- Verified edaee15
- Verified cc66ab6
- Verified 5f99d56
- Verified 031819a
- Verified ✓ dfc7f79

```

2062 2076      }
2063 -         | defs_head f_opt_paren_args '=' endless_command
2077 +         | defs_head[head] f_opt_paren_args[args] '=' endless_command[bodystmt]
2064 2078      {
2065 -         endless_method_name(p, $<node>1, &@1);
2066 -         restore_defun(p, $<node>1->nd_defn);
2079 +         endless_method_name(p, $<node>head, &@head);
2080 +         restore_defun(p, $<node>head->nd_defn);
2067 2081      /*%%*/
2068 -         $$ = set_defun_body(p, $1, $2, $4, &@$);
2082 +         $$ = set_defun_body(p, $head, $args, $bodystmt, &@$);
2069 2083      /*%
2070 -         $1 = get_value($1);
2084 +         $head = get_value($head);
2071 2085      %*/
2072 -         /*% ripper: defs!(AREF($1, 0), AREF($1, 1), AREF($1, 2), $2, bodystmt!($4, Qnil, Qnil, Qnil)) %*/
2086 +         /*% ripper: bodystmt!($bodystmt, Qnil, Qnil, Qnil) %*/
2087 +         /*% ripper: defs!(AREF($head, 0), AREF($head, 1), AREF($head, 2), $args, $$) %*/
2073 2088      local_pop(p);
2074 2089      }
2075 2090      | backref TOP_ASGN lex_ctxt command_rhs

```

```

2062 2076      }
2063 -         | defs_head f_opt_paren_args '=' endless_command
2077 +         | defs_head[head] f_opt_paren_args[args] '=' endless_command[bodystmt]
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2067 2081      /*%%*/
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2082 +         $$ = set_defun_body(p, $head, $args, $bodystmt, &@$);
2069 2083      /*%
2070 -         $1 = get_value($1);
2084 +         $head = get_value($head);
2071 2085      %*/
2072 -         /*% ripper: defs!(AREF($1, 0), AREF($1, 1), AREF($1, 2), $2, bodystmt!($4, Qnil, Qnil, Qnil)) %*/
2086 +         /*% ripper: bodystmt!($bodystmt, Qnil, Qnil, Qnil) %*/
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2087 +         /*% ripper: defs!(AREF($head, 0), AREF($head, 1), AREF($head, 2), $args, $$) %*/
2073 2088      local_pop(p);
2074 2089      }
2075 2090      | backref TOP_ASGN lex_ctxt command_rhs

```

2

Parameterizing rules

Implement parameterizing rules #181

Merged

yui-knk merged 9 commits into `ruby:master` from `ydah:parameterizing_rules` on Nov 4, 2023

Conversation 1

Commits 9

Checks 14

Files changed 12



ydah commented on Nov 4, 2023 • edited

Collaborator



This PR is implement parameterizing rules.

- option
 - implement
 - test code
- nonempty_list
 - implement
 - test code
- list
 - implement
 - test code

Use user defined parameterizing rules #10602

 Merged yui-kinokuni merged 2 commits into `ruby:master` from `ydah:use-user-defined-parameterizing-rules`  on Apr 29

 Conversation **4**  Commits **2**  Checks **100**  Files changed **4**



ydah commented on Apr 23 • edited ▾

Contributor 

- Use user defined parameterizing rules
- Add DSL support for ripper with `%rule` actions in `preproc.rb`



ydah force-pushed the `use-user-defined-parameterizing-rules` branch from `e04f12d` to `fd41dec` 2 months ago [Compare](#)



This comment has been minimized.

 Show comment

2951 2951

2952 2952 %token tLAST_TOKEN

2953 2953

2954 + /*

2955 + * parameterizing rules

2956 + */

2957 + %rule words(begin, word_list): begin ' '+ word_list tSTRING_END

2958 + {

2959 + \$\$ = make_list(\$3, &@\$);

2960 + /*% ripper: array!(\$:3) %*/

2961 + }

2962 + ;

2963 +

2954 2964 %%

2955 2965 program : {

2956 2966 SET_LEX_STATE(EXPR_BEG);

.....
↓
↑
.....
@@ -6104,11 +6114,7 @@ regexp : tREGEXP_BEG regexp_contents tREGEXP_END

6104 6114

}

2951 2951

2952 2952 %token tLAST_TOKEN

2953 2953

2954 + /*

2955 + * parameterizing rules

2956 + */

2957 + %rule words(begin, word list): begin ' '+ word_list tSTRING_END

2958 + {

2959 + \$\$ = make_list(\$3, &@\$);

2960 + /*% ripper: array!(\$:3) %*/

2961 + }

2962 + ;

2963 +

2954 2964 %%

2955 2965 program : {

2956 2966 SET_LEX_STATE(EXPR_BEG);



@@ -6104,11 +6114,7 @@ regexp : tREGEXP_BEG regexp_contents tREGEXP_END

6104 6114

}

```
2951 2951
2952 2952 %token tLAST_TOKEN
2953 2953
2954 + /*
2955 + *     parameterizing rules
2956 + */
2957 + %rule words(begin, word_list): begin ' '+ word list tSTRING_END
2958 +     {
2959 +         $$ = make_list($3, &@$);
2960 +         /*% ripper: array!($:3) %*/
2961 +     }
2962 +     ;
2963 +
```

```
2954 2964 %%
2955 2965 program      : {
2956 2966                SET_LEX_STATE(EXPR_BEG);
```

```
.....
↓
↑
.....
@@ -6104,11 +6114,7 @@ regexp      : tREGEXP_BEG regexp_contents tREGEXP_END
```

```
6104 6114                }
```

```

6104 6114          }
6105 6115          ;
6106 6116
6107 - words      : tWORDS_BEG ' '+ word_list tSTRING_END
6108 -          {
6109 -             $$ = make_list($3, &@$);
6110 -             /*% ripper: array!(($:3) %*/
6111 -          }
6117 + words      : words(tWORDS_BEG, word_list) <node>
6112 6118          ;
6113 6119
6114 6120  word_list : /* none */
↕
@@ -6132,11 +6138,7 @@ word      : string_content
6132 6138          }
6133 6139          ;
6134 6140
6135 - symbols    : tSYMBOLS_BEG ' '+ symbol_list tSTRING_END
6136 -          {
6137 -             $$ = make_list($3, &@$);
6138 -             /*% ripper: array!(($:3) %*/

```

```

6104 6114          }
6105 6115          ;
6106 6116
6107 - words      : tWORDS_BEG ' ' + word_list tSTRING_END
6108 -          {
6109 -             $$ = make_list($3, &@$);
6110 -             /*% ripper: array!(($:3) %*/
6111 -          }
6117 + words      : words(tWORDS_BEG, word_list) <node>
6112 6118          ;
6113 6119
6114 6120  word_list  : /* none */
⚡
@@ -6132,11 +6138,7 @@ word      : string_content
6132 6138          }
6133 6139          ;
6134 6140
6135 - symbols    : tSYMBOLS_BEG ' ' + symbol_list tSTRING_END
6136 -          {
6137 -             $$ = make_list($3, &@$);
6138 -             /*% ripper: array!(($:3) %*/

```

3

Inlining

Introduce Inlining #369

Merged

yui-knk merged 11 commits into `ruby:master` from `ydah:inline` on Apr 2

Conversation 16

Commits 11

Checks 16

Files changed 12



ydah commented on Feb 10 • edited

Collaborator



This PR implements the [Inlining](#) feature in Menhir in Lrama.



ydah force-pushed the `inline` branch 3 times, most recently from `0301414` to `15d7e3f` 4 months ago

[Compare](#)



ydah force-pushed the `inline` branch from `56912c3` to `6ed3a25` 3 months ago

[Compare](#)



ydah changed the title ~~[WIP] Introduce Inlining~~ [PoC] Introduce Inlining on Mar 6

Introduce `ident_or_const` inline rule #10941

Merged

nobu merged 1 commit into `ruby:master` from `S-H-GAMELINKS:introuce/inline_ident_or_const_rule` last week

Conversation 0

Commits 1

Checks 101

Files changed 1



S-H-GAMELINKS commented 2 weeks ago

Contributor

Introduce `ident_or_const` inline rule.
And, it replace to `tIDENTIFIER` and `tCONSTANT` match pattern replaced.



Introduce `ident_or_const` inline rule

Verified ✓ 073b2bf



nobu approved these changes last week

[View reviewed changes](#)

2888 2888

2889 2889 %token tLAST_TOKEN

2890 2890

2891 + /*

2892 + * inlining rules

2893 + */

2894 + %rule %inline ident_or_const: tIDENTIFIER

2895 + | tCONSTANT

2896 + ;

2897 +

2891 2898 /*

2892 2899 * parameterizing rules

2893 2900 */

↓
↑

@@ -3232,12 +3239,7 @@ command_asgn : lhs '=' lex_ctxt command_rhs

3232 3239 /*% ripper: opassign!(aref_field!(\$:1, \$:3), \$:5, \$:7) %*/

3233 3240

3234 3241 }

3235 - | primary_value call_op tIDENTIFIER TOP_ASGN lex_ctxt command_rhs

3236 - {

2888 2888

2889 2889 %token tLAST_TOKEN

2890 2890

2891 + /*

2892 + * inlining rules

2893 + */

2894 + %rule %inline ident_or_const: tIDENTIFIER

2895 + | tCONSTANT

2896 + ;

2897 +

2891 2898 /*

2892 2899 * parameterizing rules

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↓
↑

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3233 3240

3234 3241 }

3235 - | primary_value call_op tIDENTIFIER TOP_ASGN lex_ctxt command_rhs

3236 - {

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2889 2889 %token tLAST_TOKEN

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2891 + /*

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2894 + %rule %inline ident_or_const: tIDENTIFIER

2895 + | tCONSTANT

2896 + ;

2897 +

2891 2898 /*

2892 2899 * parameterizing rules

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↓
↑

@@ -3232,12 +3239,7 @@ command_asgn : lhs '=' lex_ctxt command_rhs

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3234 3241 }

3235 - | primary_value call_op tIDENTIFIER TOP_ASGN lex_ctxt command_rhs

3236 - {

```

3232 3239      /*% ripper: opassign!(aref_field!($:1, $:3), $:5, $:7) %*/
3233 3240
3234 3241      }
3235      -      | primary_value call_op tIDENTIFIER TOP_ASGN lex_ctxt command_rhs
3236      -      {
3237      -          $$ = new_attr_op_assign(p, $1, $2, $3, $4, $6, &@$);
3238      -          /*% ripper: opassign!(field!($:1, $:2, $:3), $:4, $:6) %*/
3239      -          }
3240      -      | primary_value call_op tCONSTANT TOP_ASGN lex_ctxt command_rhs
3241      +      | primary_value call_op ident_or_const TOP_ASGN lex_ctxt command_rhs
3242      +      {
3243

```



```
@@ -3232,12 +3239,7 @@ command_asgn      : lhs '=' lex_ctxt command_rhs
```

```
3232 3239      /*% ripper: opassign!(aref_field!($:1, $:3), $:5, $:7) %*/
```

```
3233 3240
```

```
3234 3241      }
```

```
3235      - | primary_value call_op tIDENTIFIER TOP_ASGN lex_ctxt command_rhs
```

```
3236      {
```

```
3237          $$ = new_attr_op_assign(p, $1, $2, $3, $4, $6, &@$);
```

```
3238      /*% ripper: opassign!(field!($:1, $:2, $:3), $:4, $:6) %*/
```

```
3239      }
```

```
3240      - | primary_value call_op tCONSTANT TOP_ASGN lex_ctxt command_rhs
```

```
3242 + | primary_value call_op ident_or_const TOP_ASGN lex_ctxt command_rhs
```

```
3241 3243      {
```



```
@@ -3232,12 +3239,7 @@ command_asgn      : lhs '=' lex_ctxt command_rhs
```

```
3232 3239 /*% ripper: opassign!(aref_field!($:1, $:3), $:5, $:7) %*/
```

```
3233 3240
```

```
3234 3241
```

```
}
```

```
3235 - | primary_value call_op tIDENTIFIER TOP_ASGN lex_ctxt command_rhs
```

```
3236 - {
```

```
3237 -     $$ = new_attr_op_assign(p, $1, $2, $3, $4, $6, &@$);
```

```
3238 - /*% ripper: opassign!(field!($:1, $:2, $:3), $:4, $:6) %*/
```

```
3239 - }
```

```
3240 - | primary_value call_op tCONSTANT TOP_ASGN lex_ctxt command_rhs
```

```
3242 + | primary_value call_op ident_or_const TOP_ASGN lex_ctxt command_rhs
```

```
3241 3243 {
```

便利

めちやくちや助かる

ほかの便利機能ないかな？

リポジトリを眺めてみる

master

8 Branches 28 Tags

Go to file

Add file

Code

ydah Merge pull request #449 from ydah/improve-report-option 11dce25 · 5 hours ago 1,258 Commits

.github	Minimal BASERUBY version was updated to 3.0	4 months ago
exe	Apply frozen string literal magic comment	3 weeks ago
lib	Improve help text for report	yesterday
sample	Ensure compatibility with Bison for %locations	4 days ago
sig	Ensure compatibility with Bison for %locations	4 days ago
spec	Improve help text for report	yesterday
template/bison	Fix an error for initialization within YY_INITIAL_VALUE() with ...	last week
.codespellignore	Add spell check in CI	8 months ago
.gitignore	Refactor some comments and Add blank line	2 weeks ago
.rspec	Initial commit	2 years ago
Gemfile	Bump steep from v1.6.0 to v1.7.1	last week
LEGAL.md	Update LEGAL.md to add new file under template/bison/	6 months ago

About

Pure Ruby LALR parser genera

- Readme
- Activity
- Custom properties
- 181 stars
- 32 watching
- 26 forks
- Report repository

Releases 28

v0.6.9 Latest on May 2

+ 27 releases

Packages

No packages published

Contributors 20

?

master

8 Branches 28 Tags

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Gemfile	Bump steep from v1.6.0 to v1.7.1	last week
LEGAL.md	Update LEGAL.md to add new file under template/bison/	6 months ago

ドキュメントがない、

コード = ドキュメント

テスト = ドキュメント

これはつらい、

ドキュメント欲しいなあ

コントリビューション
チャンス

一緒にドキュメント
やりましょう

さいごに

Lrama はいいぞ

Lrama チーム

ありがとう

parse.y is NOT Hell!
We can hack parse.y!