## mruby ver3.0 bytecode sample.

mruby code

```
puts "ABC", 3.14159265358979
def func1
puts "This is func1"
end
class Class1
def method1
 puts "This is Class1"
def method2
end
end
begin
raise
rescue
puts
end
```

### RITE binary header (File header)

000000000:  $\underbrace{52\ 49\ 54\ 45}_{\text{ident}}$   $\underbrace{30\ 32\ 30\ 30}_{\text{major/minor}}$   $\underbrace{00\ 00\ 01\ a8}_{\text{size}}$   $\underbrace{4d\ 41\ 54\ 5a}_{\text{compiler name}}$  RITE0200....MATZ

00000010: 30 30 30 30 0000

compiler ver

#### **RITE Section header**

<u>49 52 45 50</u> <u>00 00 01 77</u> IREP...0

ident size

IREP record

30 33 30 30 0300 rite version

### **IREP record SEQ 1**

00000030: 51 02 00 02 ...(ilen bytes)

Catch handler 1 (#clen)

00000070: <u>00</u> <u>00</u> <u>00</u> <u>00</u> <u>1e</u> <u>00</u> <u>00</u> <u>00</u> <u>24</u> <u>00</u> <u>00</u> <u>00</u> <u>27</u> . . . . . . . . \$ . . . ' .

> type begin end target

POOL 1

00000070: <u>00</u>

00000080: <u>02</u> <u>00</u> <u>00</u> <u>03</u> <u>41</u> <u>42</u> <u>43</u> <u>00</u> <u>05</u> <u>11</u> <u>2d</u> <u>44</u> <u>54</u> <u>fb</u> <u>21</u> <u>09</u> ....ABC...-DT.!. 長さは、TTにより変化

#pool TT len ("ABC") TT (double)

00000090: 40 @

(double)

SYMS 1

00000090: ....puts...func

## **IREP record SEQ 2**

00000000:  $\underline{00\ 00\ 00\ 39}\ \underline{00\ 02}\ \underline{00\ 05}\ \underline{00\ 00}\ \underline{00\ 00}\ \underline{00}$ ...9.......

record size #local #reg #child #clen ilen

000000d0: <u>0f</u> 35 00 00 00 14 02 51 03 00 2f 02 00 01 39 02 .5.....Q../...9.

POOL 2

<u>01</u> <u>00</u> <u>00</u> <u>00</u> <u>04</u> 54 68 69 73 20 69 73 20 66 75 6e .....This is fun 000000e0:

SYMS 2

000000f0: 00 01 00 04 70 75 74 73 00 ....puts.

**IREP record SEQ 3** 000000f0: <u>00 00 00 3b</u> . . . . ; 00000100: <u>00 01 00 03 00 02 00 00</u> <u>00 15</u> 68 01 5b 02 00 64 ......h.[..d #local #reg #child #clen POOL 3 00000110: 00 00000120: 00 SYMS 3 00000120: <u>00 02 00 07 6d 65 74 68 6f 64 31 00 00 07</u> 6d ....method1...m #slen len data1\0 **IREP record SEQ 4** 00000130:  $\underline{00} \quad \underline{00} \quad \underline{00} \quad \underline{00} \quad \underline{3a} \quad \underline{00} \quad \underline{02} \quad \underline{00} \quad \underline{05} \quad \underline{00}$ . . . : . . . . . record size #local #reg #child 00000140: <u>00 00 00 00 05 35 00 00 00 14 02 51 03 00 2f 02 .....5.....Q../.</u> #clen ilen POOL 4  $\underline{00\ 01}\ \underline{00}\ \underline{00}\ \underline{00}\ \underline{0e}\ 54\ 68\ 69\ 73\ 20\ 69\ 73\ \dots9\dots$  This is #pool TT len data 00000150: SYMS 4 00000160: <u>00 01 00 04</u> 70 75 74 73 ...puts #slen len data **IREP record SEQ 5** <u>00 00 00 1a 00 02 00 03 00 00 00 00 00 08 35</u> 00000170: record size #local #reg #child #clen ilen POOL 5 00000180: 00 00 #pool SYMS 5 00000180: 00 00 #slen **LVAR SECTION** 00000180: <u>4c 56 41 52</u> <u>00</u> .....9.....LVAR. ident size

ident size

END....

00000190: <u>00 00 15</u> 00 00 00 01 00 01 26 00 00 00 00 00 ............

size

# **END SECTION**

000001a0: <u>45 4e 44 00</u> <u>00 00 00 08</u>

ident size