Compiler Principle: Report on Stage 1

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Works

```
MiniDecaf/src
  ├── asm---------------------------------
  |   ├── riscv_md.cpp
          --- Add emitUnaryTac() for new operations.
          --- Add the method of output risc-v code for new operations.
              --- Sometimes use multi operations in risc-v to realize one operation of tac.
              --- Use "beq" for LAND.
  |   └── riscv_md.hpp
          --- Add RiscvInstr::Opcode for new operations.
  ├── frontend----------------------------
  |   ├── parser.y
          --- Add the grammars.
  |   └── scanner.l
          --- Add these symbols.
          "-" MINUS
          "+" PLUS
          "*" TIMES
          "/" SLASH
          "%" MOD
          "!" LNOT
          "~" BNOT
          "<=" LEQ
          ">=" GEQ
          "==" EQU
          "!=" NEQ
          "<" LT
          ">" GT
          "||" OR
          "&&" AND
          --- Delete the rule ". {}".
  ├── tac---------------------------------
  |   └── tac.hpp
          --- Add the types of Tac.
              "SUB"
              "MUL"
```

Works continued on next page...

```
                "DIV"
                "MOD"
                "EQU"
                "NEQ"
                "LES"
                "LEQ"
                "GTR"
                "GEQ"
                "NEG"
                "LAND"
                "LOR"
                "LNOT"
                "BNOT"
    ├── translation-------------------------
    |   ├── translation.cpp
          --- Add Translation::visit function for new types of ast node.
    |   ├── translation.hpp
          --- Clarify the visit functions.
    |   └── type_check.cpp
          --- Add SemPass2::visit function for new types of ast node.
```

Quizzes

step2:

`-~2147483647`

step3:

`a = -2147483648, b = -1`

Output(g++, x86-64): `Floating point exception (core dumped)`.

Output(riscv64-unknown-elf-g++): `-2147483648`.

step4:

It can save the time.

Also, a tricky implementation in Hungary algorithm

`if (!Path[u] || get_path(Path[u]))`

That means, if u haven't match yet, we can just use u, otherwise, we're trying to find another matching node for u.