CARL Compilation Flow

hello.carl (Program)
BEGIN { print 42; }
\w*43\w* {print $0;}

Input Text File
Jane 555-4433
Bill 444-3322
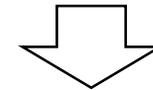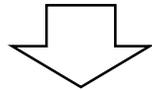
Compiler Source Code
scanner.mll, parser.mly,
ast.ml, sast.ml,
codegel.ml, semant.ml,
convert.ml(?)

CARL Executable

hello.ll (LLVM)
@NPAT …
@RS …

**Hello
Executable**

42
Jane 555-4433

Once to create compiler

Once to create
library

carl_engine.cpp
Int main(){
parse, patten, action

carl_engine.o
Int main(){
parse, patten, action

Compiled to
create each
CARL program
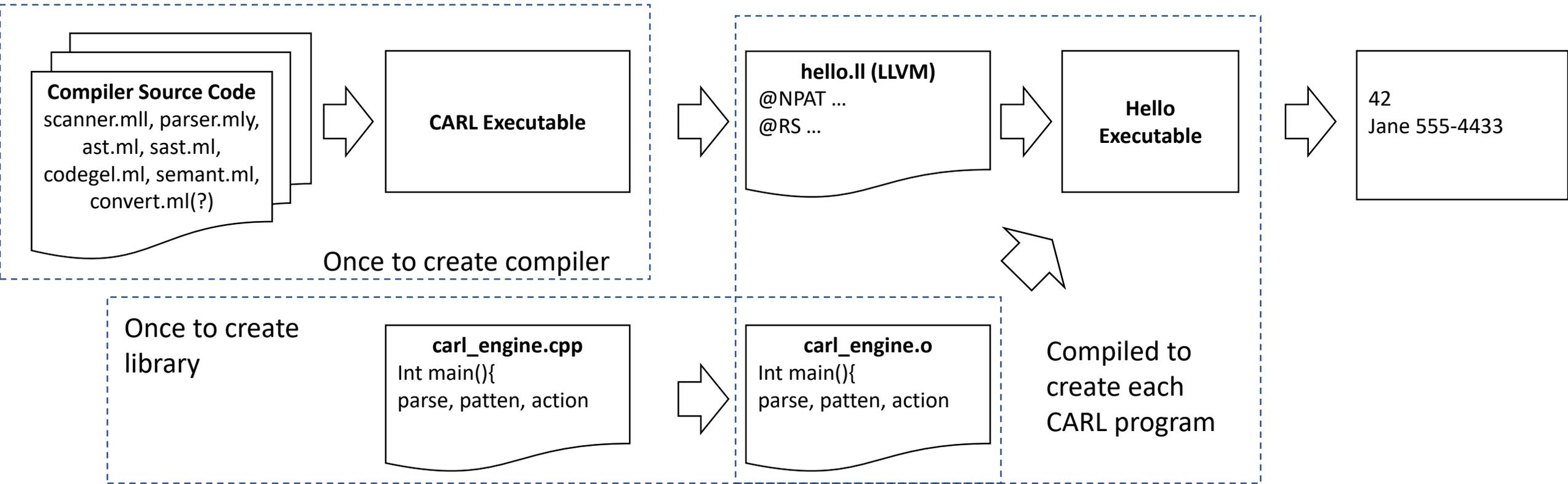
```
carl_engine.cpp
Int main(){
   opens the file;
   parse using RS, FS
   make_c_arrays
   for (int i; i < NPAT, i++){
      if pattern[i]
         (*action[i]) (int len, char** cfields, char*
cfield_len)

}
```

```
carl_source.llvm
int NPAT = 2;
char RS = '\n';
char FS = ' ';
char** patterns;
void (**actions)(const int, char**, int*);
```