```
data Module = ......
data Class    = ......
data Method  = ......
data Stat     = ......
data Expr     = ......
data Decl     = ......
data Type     = ......
```

```
type ESem a b c d e f
= ( (...,...,...)
  , (...,...)
  , (...,...,...,...,...,...)
  , ...
```

```
compSem ::  ESem
    (......  →  ......)
    (......  →  ......)
    (......  →  ......)
    (......  →  ......)
    (......  →  ......)
    (......  →  ......)
    (......  →  ......)
```

Attributes that are passed top-down

Attributes that are generated bottom-up

```
compSem = (...dozens of functions...) ......
```