

20 mins gone

```

procedure <Compute Area
<body>
end Compute Area;

```

procedure area
body
end value;

Attribute grammar

Syntax rule: $\langle \text{assign} \rangle \rightarrow \langle \text{var} \rangle = \langle \text{expression} \rangle$

Semantic C: $\langle \text{Exp} \rangle$ expected type $\leftarrow \langle \text{Var} \rangle$ actual type
 $\hookrightarrow \langle \text{inherited} \rangle$

$$\langle \text{expr} \rangle_a \rightarrow \langle \text{var} \rangle[2] + \text{var}[3]$$

Semantic rule $\langle \text{expr} \rangle \text{actual_type} \leftarrow$
 if $\langle \text{var} \rangle[2].\text{act_type} = \text{int}$ and
 $\langle \text{var} \rangle[3].\text{actual_type} = \text{int}$
 then int
 else real
 end if

A symbol table has the type of the variable
the ~~com~~ parser will return
the type from the symbol table in string format

from parent - sibling

