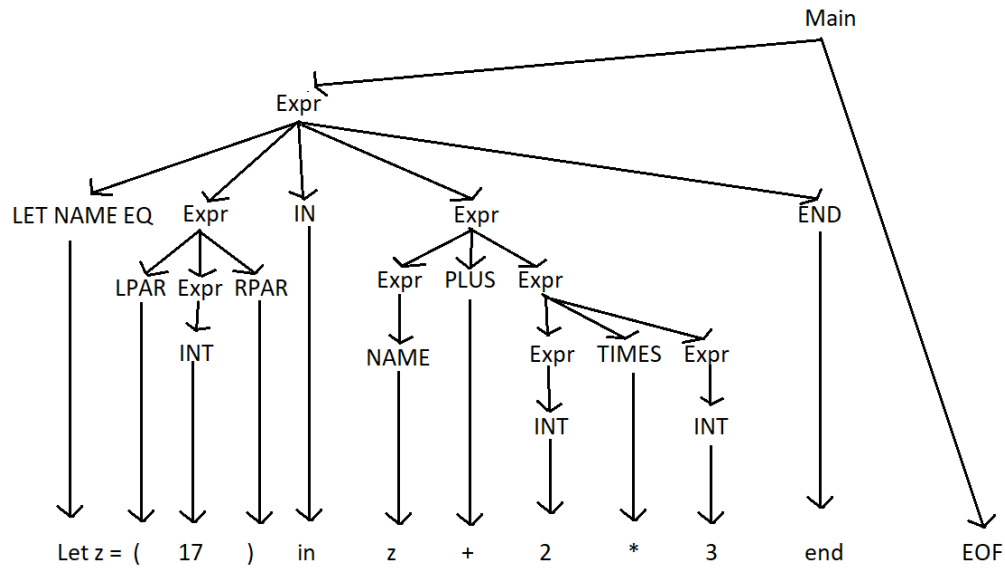


3.3

Main ::= Expr EOF	rule A
Expr ::= NAME	rule B
CSTINT	rule C
MINUS CSTINT	rule D
LPAR Expr RPAR	rule E
LET NAME EQ Expr IN Expr END	rule F
Expr TIMES Expr	rule G
Expr PLUS Expr	rule H
Expr MINUS Expr	rule I

	Main
A	Expr EOF
F	let z = Expr in Expr end EOF
H	let z = Expr in Expr + Expr end EOF
G	let z = Expr in Expr + Expr * Expr end EOF
C	let z = Expr in Expr + Expr * 3 end EOF
C	let z = Expr in Expr + 2 * 3 end EOF
B	let z = Expr in z + 2 * 3 end EOF
E	let z = (Expr) in z + 2 * 3 end EOF
C	let z = (17) in z + 2 * 3 end EOF

3.4



3.5

Output from completing exercise 3.5

```
> open Parse;;
> fromString "1 + 2 * 3";;
val it: Absyn.expr = Prim ("+", CstI 1, Prim ("*", CstI 2, CstI 3))
```

3.6

The function `compString` can be found in `Expr.fs` line 337.

Output from our `compString` function:

```
val it: sinstr list =  
  [SPop; SSwap; SAdd; SMul; SCstI 3; SCstI 2; SVar 0; SCstI 17]
```

3.7

See files: *ExprLex.fsl*, *ExprPar.fsy* & *Absyn.fs* for our solution.

```
> fromString "if 1 then 2 else 3";;  
val it: Absyn.expr = If (CstI 1, CstI 2, CstI 3)
```