

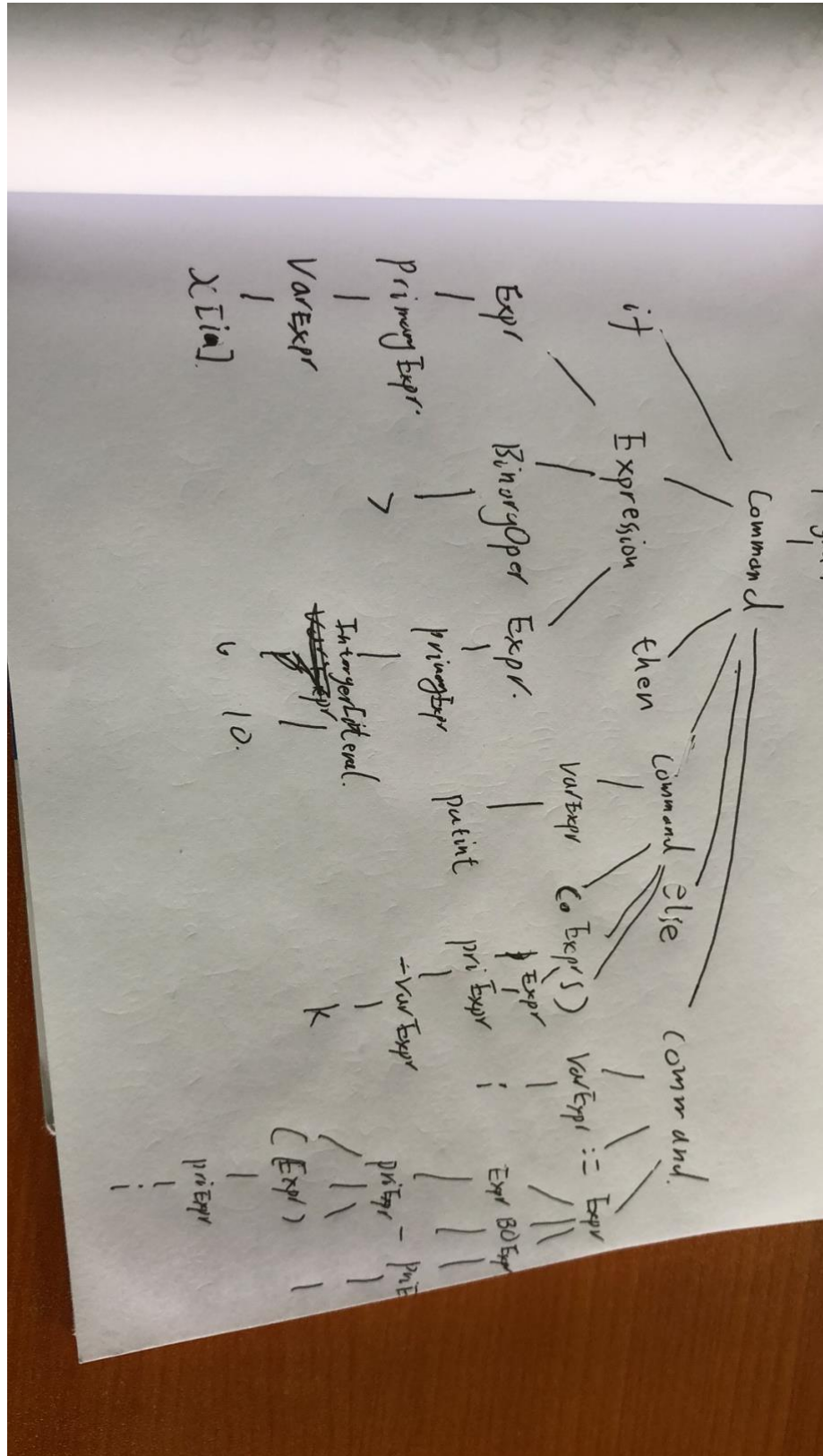
Q1A) 1,2,4

Q1B) $\{$

Q2:

$$S = AA \mid B \mid SS$$

Q3.



```

if a > b then
let var a : Integer
in
b := a
else
a := b

```

Q5,

```

(If,line 1, column 1)
(Id {idName = "a"},line 1, column 4)
(Op {opName = ">"},line 1, column 6)
(Id {idName = "b"},line 1, column 8)
(Then,line 1, column 10)
(Let,line 2, column 1)
(Var,line 2, column 5)
(Id {idName = "a"},line 2, column 9)
(Colon,line 2, column 11)
(Id {idName = "Integer"},line 2, column 13)
(In,line 3, column 1)
(Id {idName = "b"},line 4, column 1)
(ColEq,line 4, column 3)
(Id {idName = "a"},line 4, column 6)
(Else,line 5, column 1)
(Id {idName = "a"},line 6, column 1)
(ColEq,line 6, column 3)
(Id {idName = "b"},line 6, column 6)
(EOF,line 7, column 1)

```

Q6,

```

CmdIf <line 1, column 1>
  ExpApp <line 1, column 4>
    ExpVar ">"
    ExpVar "a"
    ExpVar "b"
  CmdLet <line 2, column 1>
    DeclVar <line 2, column 5>
      "a"
      TDBaseType "Integer"
    CmdAssign <line 4, column 1>
      ExpVar "b"
      ExpVar "a"
  CmdAssign <line 6, column 1>
    ExpVar "a"
    ExpVar "b"

```