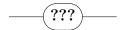
ECS 140A Homework 2

Jones, Hardy 999397426 Professor Olsson Winter 2014



First sets:

```
First(program) = First(block)
= First(declarations) \cup First(statementList)
= \{var\} \cup First(statementList)
= \{var\} \cup First(statement)
= \{var\} \cup First(assignment) \cup First(print) \cup First(if) \cup First(do) \cup First(fa)
= \{var\} \cup First(id) \cup \{print\} \cup \{if\} \cup \{do\} \cup \{fa\}
= \{var\} \cup \{id\} \cup \{print\} \cup \{if\} \cup \{do\} \cup \{fa\}
= \{var, \{id\}, print, if, do, fa\}
```

Expressions:

$$First(expression) = First(simple)$$

$$= First(term)$$

$$= First(factor)$$

$$= \{(\} \cup \{id\} \cup \{number\}\}$$

$$= \{(, \{id\}, \{number\}\}\}$$