Name: CUNYFirst ID Number:

Type your name and CUNYFirst ID # above.

Ada Language Subset 1 (ADALS1) Grammar

```
<S> → procedure IDENT is <DECPART> begin <SEQOFSTMT> end ; EOI

<DECPART> → ε
<DECPART> → <OBJECTDEC> <DECPART>

<OBJECTDEC> → <IDENTLIST> : boolean ;
<OBJECTDEC> → <IDENTLIST> : integer ;

<IDENTLIST> → IDENT
<IDENTLIST> → IDENT , <IDENTLIST>

<SEQOFSTMT> → <STATEMENT>
<SEQOFSTMT> → <STATEMENT> <SEQOFSTMT>

<STATEMENT> → null ;
<STATEMENT> → IDENT := <EXPRESSION> ;
<STATEMENT> → if <CONDITION> then <SEQOFSTMT> end if ;
<STATEMENT> → if <CONDITION> then <SEQOFSTMT>
                              else <SEQOFSTMT> end if ;
<STATEMENT> → while <CONDITION> loop <SEQOFSTMT> end loop ;
<STATEMENT> → get ( <IDENTLIST> ) ;
<STATEMENT> → put ( <IDENTLIST> ) ;
<STATEMENT> → newline ;

<CONDITION> → <EXPRESSION>

<EXPRESSION> → <SIMPEXPR>
<EXPRESSION> → <SIMPEXPR> = <SIMPEXPR>
<EXPRESSION> → <SIMPEXPR> /= <SIMPEXPR>
<EXPRESSION> → <SIMPEXPR> < <SIMPEXPR>
<EXPRESSION> → <SIMPEXPR> <= <SIMPEXPR>
<EXPRESSION> → <SIMPEXPR> > <SIMPEXPR>
<EXPRESSION> → <SIMPEXPR> >= <SIMPEXPR>

<SIMPEXPR> → <SIMPEXPR> + <TERM>
<SIMPEXPR> → <SIMPEXPR> - <TERM>
<SIMPEXPR> → <TERM>

<TERM> → <TERM> * <PRIMARY>
<TERM> → <TERM> / <PRIMARY>
<TERM> → <TERM> rem <PRIMARY>
<TERM> → <PRIMARY>
```

```
<PRIMARY> → ( <EXPRESSION> )
<PRIMARY> → IDENT
<PRIMARY> → NUMLIT
<PRIMARY> → true
<PRIMARY> → false
```