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-- file LALRDefs.mesa
-- last modified by Satterthwaite, May 5, 1978 2:31 PM
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LALRDefs: DEFINITIONS = PRIVATE
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```
  BEGIN -- data structures used by the MESA parser
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  Symbol: TYPE = [0..377B];
  State: TYPE = CARDINAL;
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```
  Asst1Entry: TYPE = MACHINE DEPENDENT RECORD [
    tlen: [0..377B],          -- number of terminal entries
    assocsym: Symbol];      -- associated symbol
```

```
  ActionTag: TYPE = MACHINE DEPENDENT RECORD [
    reduce: BOOLEAN,         -- TRUE iff reduce entry
    plength: [0..17B]];     -- number of symbols in production rhs
```

```
  ActionEntry: TYPE = MACHINE DEPENDENT RECORD [
    rtag: ActionTag,        -- [FALSE,0] if a shift entry
    transition: [0..377B]]; -- production number / next state
```

```
  ProductionInfo: TYPE = MACHINE DEPENDENT RECORD [
    rule: [0..377B],        -- reduction rule
    lhs: Symbol];          -- production lhs symbol
```

```
  VocabHashEntry: TYPE = MACHINE DEPENDENT RECORD [
    symptr: [0..377B],      -- symbol index
    link: [0..377B]];     -- link to next entry
```

```
  SymbolRecord: TYPE = RECORD [
    class: Symbol,         -- the token class
    value: UNSPECIFIED,
    index: CARDINAL];     -- source line index
```

```
-- token indices for the scanner
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```
tokenID: Symbol = 1;
tokenNUM: Symbol = 2;
tokenLNUM: Symbol = 3;
tokenSTR: Symbol = 4;
tokenLSTR: Symbol = 5;
tokenCHAR: Symbol = 6;
tokenMINUS: Symbol = 21;
tokenDOT: Symbol = 25;
tokenDOTS: Symbol = 10;
tokenEQUAL: Symbol = 13;
tokenARROW: Symbol = 11;
tokenLESS: Symbol = 15;
tokenLE: Symbol = 17;
tokenGREATER: Symbol = 16;
tokenGE: Symbol = 18;
```

```
InitialSymbol: Symbol = tokenDOT;
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```
-- output of the table generator
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hashval: CARDINAL = 203;
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```
endmarker: Symbol = 135;
lastntstate: State = 162;
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```
LALRTable: PUBLIC TYPE = PRIVATE MACHINE DEPENDENT RECORD [
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```
  scantable: RECORD[
    hashtab: ARRAY [0..203] OF VocabHashEntry,
    scantab: ARRAY CHARACTER [40C..177C] OF Symbol,
    vocabbody: RECORD [ -- a string body
      length, maxlength: CARDINAL,
      text: ARRAY [0..313] OF UNSPECIFIED],
    vocabindex: ARRAY [0..135] OF CARDINAL],
  parsetable: RECORD[
    proddata: ARRAY [0..336] OF ProductionInfo,
    nstate: ARRAY [0..162] OF CARDINAL,
    nlen: ARRAY [0..162] OF CARDINAL,
    nsym: ARRAY [0..254] OF Symbol,
    nact: ARRAY [0..254] OF ActionEntry,
```

```
ntdefaults: ARRAY [0..120] OF ActionEntry,  
asst1: ARRAY [0..347] OF Asst1Entry,  
tstate: ARRAY [0..347] OF CARDINAL,  
tsym: ARRAY [0..1419] OF Symbol,  
tact: ARRAY [0..1419] OF ActionEntry];
```

```
END.
```