Terminal Symbols: eof := 0eol := 1definingSymbol := 2metaIdentifier := 3 terminalString := 4SDFGrammar := 5Syntax := 6SyntaxRule = 7EolLoop := 8DefinitionsList = 9Definition := 10Ø SDFGrammar: **0** Syntax 1 Syntax: 1 Syntax SyntaxRule **2** SyntaxRule 2 SyntaxRule: 3 metaIdentifier definingSymbol eol DefinitionsList 3 Eolloop: 4 EolLoop eol 5 eol **4** DefinitionsList: **6** DefinitionsList Definition EolLoop 7 Definition EolLoop **5** Definition: 8 Definition metaldentifier 9 Definition terminalString 10 metaIdentifier 11 terminalString

| Shift | | | | | Reduce | | | | | Goto | | | | |
|-------|--------|----|--------|------|--------|--------|----|--------|-----------|------|--------|----|--------|------|
| | switch | | symbol | goto | | switch | | reduce | lookahead | | switch | | symbol | goto |
| S0 | 0 | 0 | 10 | 3 | S0 | | 0 | 0 | 0 | S0 | 0 | 0 | 6 | 1 |
| S1 | 2 | 1 | | | S1 | 0 | 1 | | | S1 | 3 | 1 | 7 | 2 |
| S2 | | 2 | 3 | 3 | S2 | | 2 | 2 | 0 | S2 | | 2 | | |
| S3 | 4 | 3 | | | S3 | | 3 | 2 | 3 | S3 | | 3 | 7 | 4 |
| S4 | | 4 | 2 | 5 | S4 | 5 | 4 | | | S4 | | 4 | | |
| S5 | 6 | 5 | | | S5 | | 5 | 1 | 0 | S5 | | 5 | | 7 |
| S6 | 8 | 6 | 1 | 6 | S6 | | 6 | 1 | 3 | S6 | 5 | 6 | 10 | 8 |
| S7 | 11 | 7 | | | S7 | 8 | 7 | | | S7 | 8 | 7 | | |
| S8 | 14 | 8 | 3 | 9 | S8 | | 8 | 3 | 0 | S8 | 10 | 8 | 10 | 11 |
| S9 | | 9 | 4 | 10 | S9 | 11 | 9 | 3 | 3 | S9 | | 9 | | |
| S10 | | 10 | | | S10 | 15 | 10 | | | S10 | | 10 | 8 | 12 |
| S11 | 18 | 11 | 3 | 9 | S11 | | 11 | 10 | 0 | S11 | 12 | 11 | | |
| S12 | 22 | 12 | 4 | 10 | S12 | 19 | 12 | 10 | 3 | S12 | | 12 | 8 | 16 |
| S13 | | 13 | | | S13 | 23 | 13 | 10 | 4 | S13 | | 13 | | |
| S14 | | 14 | 3 | 13 | S14 | 27 | 14 | | | S14 | | | | |
| S15 | | 15 | 4 | 14 | S15 | 31 | 15 | 11 | 0 | S15 | | | | |
| S16 | 24 | 16 | 1 | 15 | S16 | 36 | 16 | 11 | 3 | S16 | | | | |
| S17 | | 17 | | | S17 | 40 | 17 | 11 | 4 | S17 | | | | |
| | | 18 | 3 | 13 | | | 18 | | | | | | | |
| | | 19 | 4 | 14 | | | 19 | 7 | 0 | | | | | |
| | | 20 | 1 | 15 | | | 20 | 7 | 3 | | | | | |
| | | 21 | | | | | 21 | 7 | 4 | | | | | |
| | | 22 | 1 | 17 | | | 22 | | | | | | | |
| | | 23 | | | | | 23 | 8 | 1 | | | | | |
| | | 24 | 1 | 17 | | | 24 | 8 | 3 | | | 1 | | |
| | | 25 | | | | | 25 | 8 | 4 | | | | | |
| | | - | | | | | 26 | | | | | | | |
| | | | | | | | 27 | 9 | 1 | | | | | |
| | | | | | | | 28 | 9 | 3 | | | | | |
| | | | | | | | 29 | 9 | 4 | | | | | |
| | | | | | | | 30 | | | | | | | |
| | | | | | | | 31 | 5 | 0 | | | | | |
| | | | | | | | 32 | 5 | 1 | | | | | |
| | | | | | | | 33 | 5 | 3 | | | | | |
| | | ļ | | | | | 34 | 5 | 4 | | | | | |
| | | | | | | | 35 | | | | | | | |
| | | | | | | | 36 | 6 | 0 | | | | | |
| | | | | | | | 37 | 6 | 3 | | | | | |
| | | | | | | | 38 | 6 | 4 | | | | | |
| | | | | | | | 39 | | | | | | | |
| | | | | | | | 40 | 4 | 0 | | | | | |
| | | | | | | | 41 | 4 | 1 | | | | | |
| | | | | | | | 42 | 4 | 3 | | | | | |
| | | | | | | | 43 | 4 | 4 | | | | | |
| | | | | | | | 44 | | | | | | | |

```
S_0 = V(\varepsilon)
I: [SDFGrammar \rightarrow \cdot Syntax]
                                                                                                    eof goto(S_1)
    [Syntax \rightarrow \cdot Syntax Syntax Rule]
                                                                                  eof|metaIdenfitier
                                                                                                          goto(S_1)
    [Syntax \rightarrow \cdot SyntaxRule]
                                                                                  eof[metaIdenfitier] goto(S_2)
    [SyntaxRule → ·metaIdenfiter definingSymbol eol DefinitionsList ,
                                                                                  eof[metaIdenfitier] goto(S_3)
                                                                                                                     shift
S_1 = V(Syntax)
    [SDFGrammar \rightarrow Syntax \cdot
                                                                                                          reduce(R_0)
                                                                                                            goto(S_4)
I: [Syntax \rightarrow Syntax \cdot SyntaxRule]
                                                                                  eof|metaIdenfitier
    [SyntaxRule → ·metaIdenfiter definingSymbol eol DefinitionsList , eof|metaIdenfitier]
                                                                                                            goto(S_3)
                                                                                                                          shift
S_2 = V(SyntaxRule)
I: [Syntax \rightarrow SyntaxRule \cdot , eof|metaIdenfitier] reduce R_2
S_3 = V(metaIdenfiter)
I: [SyntaxRule \rightarrow metaIdenfiter \cdot definingSymbol eol DefinitionsList], eof[metaIdenfitier] goto(S_5) shift
S_4 = V(Syntax Syntax Rule)
I: [Syntax \rightarrow Syntax Syntax Rule \cdot , eof|metaIdenfitier] reduce R_1
S_5 = V(metaIdenfiter definingSymbol)
I: [SyntaxRule \rightarrow metaIdenfiter definingSymbol \cdot eol DefinitionsList], eof[metaIdenfitier] goto(S_6) shift
S_6 = V(metaIdenfiter definingSymbol eol)
I: [SyntaxRule \rightarrow metaIdenfiter definingSymbol eol \cdot DefinitionsList]
                                                                                                  eof[metaIdenfitier]
                                                                                                                           goto(S_7)
    [DefinitionsList → • DefinitionsList Definition EolLoop
                                                                                eof|metaIdenfitier|terminalString|
                                                                                                                           goto(S_7)
                                                                                                                           goto(S_8)
    [DefinitionsList \rightarrow \cdot Definition\ EolLoop]
                                                                                eof|metaIdenfitier|terminalString|
    [Definition \rightarrow \cdot Definition metaldenfitier]
                                                                                eol|metaIdenfitier|terminalString|
                                                                                                                           goto(S_8)
                                                                                eol|metaIdenfitier|terminalString|
                                                                                                                           goto(S_8)
    [Definition → · Definition terminalString
    [Definition \rightarrow \cdot metaIdenfitier]
                                                                                eol|metaIdenfitier|terminalString|
                                                                                                                           goto(S_9)
                                                                                                                                        shift
    [Definition → ·terminalString
                                                                                eol|metaIdenfitier|terminalString
                                                                                                                           goto(S_{10})
                                                                                                                                        shift
```

```
S_7 = V(metaIdenfiter definingSymbol eol DefinitionsList)
      [SyntaxRule → metaIdenfiter definingSymbol eol DefinitionsList.
                                                                                                                        eof|metaIdenfitier]
                                                                                                                                                      reduce(R_3)
                                                                                                  eof|metaIdenfitier|terminalString|
                                                                                                                                                        goto(S_{11})
     [DefinitionsList \rightarrow DefinitionsList \cdot Definition EolLoop]
                                                                                                                                                        goto(S_{11})
      [Definition \rightarrow \cdot Definition metaldenfitier]
                                                                                                   eol|metaIdenfitier|terminalString|
      [Definition → • Definition terminalString
                                                                                                   eol|metaIdenfitier|terminalString|
                                                                                                                                                        goto(S_{11})
      [Definition \rightarrow \cdot metaIdenfitier]
                                                                                                   eol|metaIdenfitier|terminalString|
                                                                                                                                                        goto(S_9)
                                                                                                                                                                         shift
                                                                                                                                                        goto(S_{10})
                                                                                                                                                                        shift
      [Definition \rightarrow \cdot terminalString]
                                                                                                   eol|metaIdenfitier|terminalString|
\frac{S_8 = V(\dots Definition)}{\text{I:} \quad \lceil DefinitionsList} \rightarrow Definition \cdot EolLoop
                                                                        eof|metaIdenfitier|terminalString|
                                                                                                                            goto(S_{12})
                                                                                                                            goto(S_{13})
I: [Definition \rightarrow Definition \cdot metaIdenfitier]
                                                                                                                                           shift
                                                                        eol|metaIdenfitier|terminalString|
                                                                                                                            goto(S_{14})
I: [Definition \rightarrow Definition \cdot terminalString]
                                                                        eol|metaIdenfitier|terminalString|
                                                                                                                                           shift
                                                                                                                            goto(S_{12})
      [EolLoop \rightarrow \cdot EolLoop eol
                                                                  eof|metaIdenfitier|terminalString|eol]
      [EolLoop \rightarrow \cdot eol]
                                                                  eof|metaIdenfitier|terminalString|eol]
                                                                                                                            aoto(S_{15})
                                                                                                                                           shift
\frac{S_9 = \textit{V}(...\, \texttt{eol}\, \texttt{metaIdenfitier})}{\texttt{I:} \quad [\textit{Definition} \rightarrow \texttt{metaIdenfitier} \cdot \quad , \quad \texttt{eof}|\texttt{metaIdenfitier}|\texttt{terminalString}] \quad \textit{reduce}(R_{10})}
S_{10} = V(... \text{ eol terminalString})
\overline{\text{I:}} \quad \overline{[\textit{Definition} \rightarrow \text{terminalString} \cdot \ , \ \text{eof}|\text{metaIdenfitier}|\text{terminalString}]} \quad reduce(R_{11})
S_{11} = V(...DefinitionsList)
I: [DefinitionsList \rightarrow DefinitionsList Definition \cdot EolLoop]
                                                                                     eof|metaIdenfitier|terminalString|
                                                                                                                                         goto(S_{16})
                                                                                                                                         goto(S_{13})
I: [Definition \rightarrow Definition \cdot metaldenfitier]
                                                                                     eol|metaIdenfitier|terminalString|
                                                                                                                                                         shift
                                                                                                                                         goto(S_{14})
I: [Definition \rightarrow Definition \cdot terminal String]
                                                                                     eol|metaIdenfitier|terminalString|
                                                                                                                                                         shift
                                                                                                                                         goto(S_{16})
      [EolLoop \rightarrow \cdot EolLoop eol
                                                                                eof|eol|metaIdenfitier|terminalString
      [EolLoop \rightarrow \cdot eol]
                                                                                eof|eol|metaIdenfitier|terminalString]
                                                                                                                                         goto(S_{15})
                                                                                                                                                         shift
S_{12} = V(... eol Definition EolLoop)
I: [DefinitionsList \rightarrow Definition\ EolLoop \cdot]
                                                                 eof|metaIdenfitier|terminalString
                                                                                                                     reduce(R_7)
I: [EolLoop \rightarrow EolLoop \cdot eol]
                                                            eof|metaIdenfitier|terminalString|eol]
                                                                                                                       goto(S_{17})
                                                                                                                                       shift
\frac{S_{13} = V(\text{...} \, Definition \, metaIdenfitier}{\text{I:} \  \  [Definition \rightarrow Definition \, metaIdenfitier \cdot \  \  , \  \  eol|metaIdenfitier|terminalString]} \quad reduce(R_8)
```

```
S_{14} = V(...Definition terminal String)
```

 $\overline{\text{I:}} \quad \overline{[Definition \rightarrow Definition \, \text{terminalString} \cdot \, , \, \, \, \text{eol} | \text{metaIdenfitier} | \text{terminalString} | \, \, \, \, reduce(R_9)$

$S_{15} = V(... Definition eol)$

I: $[EolLoop \rightarrow eol \cdot , eof|metaIdenfitier|terminalString|eol]$ $reduce(R_5)$

```
\frac{S_{16} = V(\text{... eol } DefinitionsList } {DefinitionsList } Definition EolLoop \cdot \\ I: [DefinitionsList \rightarrow DefinitionsList Definition EolLoop \cdot \\ , eof|metaIdenfitier|terminalString] reduce(R_6)
                                                                                         , eof|metaIdenfitier|terminalString|eol] goto(S_{17}) shift
I: [EolLoop \rightarrow EolLoop \cdot eol
```

$\underline{S_{17} = V(... EolLoop eol)}$

I: $[EolLoop \rightarrow EolLoop eol \cdot , eof|metaIdenfitier|terminalString|eol] reduce(R_4)$