Departamento de Computación,
Facultad de Ciencias Exactas y Naturales,
Universidad de Buenos Aires

Trabajo Práctico 2

Compositor Musical

Teoría de Lenguajes

Primer Cuatrimestre de 2015

Grupo: Autores del Autómata Automático Autodestructivo

Apellido y Nombre	LU	E-mail
Matayoshi, Leandro	79/11	leandro.matayoshi@gmail.com
Panarello, Bernabé	FALTA LU	bpanarello@gmail.com
Vega, Leandro	698/11	leandrogvega@gmail.com

Índice

1.   Introducción del problema a resolver

2.   Descripción del problema resuelto

3/8

3. Gramática

3.1. Gramática deducida

H → {TEMPO}{COMPASHEADER}{CONSTINIT}{VOICELIST}
H → {TEMPO}{COMPASHEADER}{VOICELIST}

TEMPO → {tempobegin}{shape}{num}

COMPASHEADER → {compasheaderbegin}{num}{slash}{num}

CONSTINIT → {CONSTLIST}

CONSTLIST → {CONST}
CONSTLIST → {CONSTLIST}{CONST}

CONST → {const}{VALUE}{equals}{VALUE}{semicolon}

VOICELIST → {VOICE}
VOICELIST → {VOICELIST}{VOICE}

VOICE → {voicebegin}{leftpar}{VALUE} {rightpar}{leftcurl}{VOICECONTENT}{rightcurl}

VOICECONTENT → {COMPAS}
VOICECONTENT → {COMPASLOOP}
VOICECONTENT → {VOICECONTENT}{COMPAS}
VOICECONTENT → {VOICECONTENT}{COMPASLOOP}

COMPASLOOP → {loopbegin}{leftpar}{VALUE} rightpar}{leftcurl}{COMPASLIST}{rightcurl}

COMPASLIST → {COMPAS}
COMPASLIST → {COMPASLIST}{COMPAS}

COMPAS → {compasbegin}{leftcurl}{NOTELIST}{rightcurl}

NOTELIST → {NOTE}
NOTELIST → {SILENCE}
NOTELIST → {NOTELIST}{NOTE}
NOTELIST → {NOTELIST}{SILENCE}

NOTE → {notebegin}{leftpar}{notename}{alter}{comma}{VALUE} {comma}{shape}{puntillo}{rightpar}{semicolon}
NOTE → {notebegin}{leftpar}{notename}{alter}{comma}{VALUE} {comma}{shape}{rightpar}{semicolon}
NOTE → {notebegin}{leftpar}{notename}{comma}{VALUE} {comma}{shape}{puntillo}{rightpar}{semicolon}
NOTE → {notebegin}{leftpar}{notename}{comma}{VALUE} {comma}{shape}{rightpar}{semicolon}

SILENCE → {silencebegin}{leftpar}{shape}{rightpar}{semicolon}
SILENCE → {silencebegin}{leftpar}{shape}{puntillo}{rightpar}{semicolon}

VALUE → {cname}
VALUE → {num}

3.2. Tokens

- TEMPOBEGIN: # tempo

- CONST: const

- EQUALS: =

- SEMICOLON: ;

- VOICEBEGIN: voz

- LEFTPAR: (

- RIGHTPAR:)

- LEFTCURL: {

- RIGHTCURL: }

- COMPASHEADERBEGIN: # compas

- COMPASBEGIN: compas

- LOOPBEGIN: repetir

- SLASH: /

- NOTEBEGIN: nota

- SILENCEBEGIN: silencio

- PUNTO: .

- ALTER: $+|-$

- SHAPE: $blanca|negra|redonda|semicorchea|corchea|semifusa|fusa$

- NOTENAME: $do|re|mi|fa|sol|la|si$

- COMMA: ,

- CNAME: $(([a-z]|[A-Z])([0-9]|[a-z]|[A-Z])*)$

- NUM: $([0]|[1-9][0-9]*)$

4. Tests

5. Manual del programa

6.   Conclusiones