- 1. $\langle prog \rangle \rightarrow \langle main \rangle EOF$
- 2. <main $> \rightarrow <$ main1> EOL
- 3. $\langle st_list \rangle \rightarrow \langle stat \rangle EOL \langle st_list \rangle$
- 4. <st list> →
- 5. $\langle \text{stat} \rangle \rightarrow \text{id} = \langle \text{sth} \rangle$
- 6. <stat> → if <expr> then EOL <st_list> else EOL <st_list> end if
- 7. $\langle \text{stat} \rangle \rightarrow \text{while } \langle \text{expr} \rangle \text{ do EOL } \langle \text{st_list} \rangle \text{ end}$
- 8. $\langle sth \rangle \rightarrow id(\langle term_list \rangle) EOL$
- 9. $\langle sth \rangle \rightarrow \langle expr \rangle EOL$
- 10. <term_list> → term <term_list2>
- 11. <term list> →
- 12.<term_list $2> \rightarrow$, <term_list2>
- 13. <term list2> →
- 14. $\langle term \rangle \rightarrow string$
- 15. $\langle term \rangle \rightarrow integer$
- 16. $\langle \text{term} \rangle \rightarrow \text{float}$
- 17. <term> → id
- 18. $\langle pm_list \rangle \rightarrow id \langle pm_list2 \rangle$
- 19. <pm_list> →
- 20. $\langle pm_list2 \rangle \rightarrow$, id $\langle pm_list2 \rangle$
- 21. <pm_list2> →
- 22. $\langle main1 \rangle \rightarrow \langle fn_list \rangle$
- 23. <main1> \rightarrow <st list>
- 24. $\langle \text{fn list} \rangle \rightarrow \langle \text{func} \rangle \text{ EOL}$
- 25. $\langle \text{func} \rangle \rightarrow \text{def id}(\langle \text{pm_list} \rangle) \text{ EOL } \langle \text{st_list} \rangle \text{ end}$
- 26. <fn list> →
- 27. $\langle stat \rangle \rightarrow INPUTs()$
- 28. $\langle \text{stat} \rangle \rightarrow \text{INPUTi}()$
- 29. $\langle \text{stat} \rangle \rightarrow \text{INPUTf}()$
- $30. < stat > \rightarrow print(< term-list >)$
- 31. $\langle \text{stat} \rangle \rightarrow \text{length(id)}$
- 32. $\langle \text{stat} \rangle \rightarrow \text{substr(id, id, id)}$
- 33. $\langle \text{stat} \rangle \rightarrow \text{ord(id, id)}$
- 34. $\langle \text{stat} \rangle \rightarrow \text{chr(id)}$