

```

1  PROGRAM KINDERREIM
2
3  USE KINDERREIMMOD
4  IMPLICIT NONE
5
6  TYPE (START) :: LIST
7  CHARACTER (LEN=50) :: FILENAME
8  TYPE (CHILD), POINTER :: CURR_CHILD
9  INTEGER :: i
10
11 ! input an cycle building
12 WRITE (*,*) "Geben Sie den Dateinamen ein: "
13 READ (*,*) FILENAME
14 CALL BUILD_CYCLE (TRIM(FILENAME), LIST)
15 WRITE (*,*) "-----"
16
17 DO
18     WRITE (*,*) "AKTUELL SPIELEN MIT: "
19     CALL PUT_CYCLE (LIST, LIST%TOP)
20     WRITE (*,*) "----- RUNDENSTART -----"
21     CURR_CHILD => LIST%TOP
22     WRITE (*,*) "----> Ehne mehne muh und raus bist du, raus
        bist du noch lange nicht, sag mir erst wie alt du bist
        ?!:"
23
24     ! first 21 steps (syllables of counting rhyme)
25     DO i=1, 20
26         CURR_CHILD => CURR_CHILD%NEXT
27     END DO
28
29     CALL PRINT_CHILD (CURR_CHILD)
30     WRITE (*,*) "Ich bin ", CURR_CHILD%DATA%AGE, " Jahre alt."
31
32     ! next steps (as much as child is old)
33     DO i=1, CURR_CHILD%DATA%AGE-1
34         CURR_CHILD => CURR_CHILD%NEXT
35     END DO
36
37     WRITE (*,*) "----> ausgeschieden ist: "
38     CALL PRINT_CHILD (CURR_CHILD%NEXT)
39     CALL DEL_NEXT (LIST, CURR_CHILD)
40
41     WRITE (*,*) "----- RUNDENENDE -----"
42
43     ! change starting point of list
44     LIST%TOP => CURR_CHILD%NEXT
45
46     IF (LAST_ONE (LIST)) EXIT
47
48 END DO
49
50 WRITE (*,*) "----- SPIELENDEN -----"
51 WRITE (*,*) "GEWONNEN HAT: "
52 CALL PUT_CYCLE (LIST, CURR_CHILD%NEXT)
53
54 DEALLOCATE (CURR_CHILD, LIST%TOP)
55
56 END PROGRAM KINDERREIM

```