Praat Scripting
03 Loops and Jumps

1. <u>Loops</u>

   (a) "For" Loops

   - The statements between the **for** line and the matching **endfor** will be executed while a variable takes on values between two expressions, with an increment (raise) of 1 on each turn of the loop. If there is no **from**, the loop variable starts at 1.

     for variable **from** expression1 **to** expression2
         xyz
     endfor
     for variable **to** expression

   - The following script plays nine sine waves, with frequencies of 200, 300, ..., 1000 Hz

```
1    for i from 2 to 10
2        Create Sound as pure tone: "tone", 1, 0, 0.3, 44100, i*100, 0.2, 0.01, 0.01
3        Play
4        Remove
5    endfor
```

   (b) "Repeat" Loops

   - The statements between the matching preceding repeat and the until line will be executed again if the expression evaluates to zero or false

     repeat
         xyz
     until expression

   - The following script measures the number of trials it takes me to throw 12 with two dice

```
1    throws = 0
2    repeat
3        eyes = randomInteger (1, 6) + randomInteger (1, 6)
4        throws = throws + 1
5    until eyes = 12
6    writeInfoLine: Ït took me ", throws, "trials to throw 12 with two dice."
```

(c) "While" Loops

while expression
> if the expression evaluates to zero or false, the execution of the script jumps after the matching endwhile

endwhile
> execution jumps back to the matching preceding while line, which is then evaluated again.

- The following script increases the variable x by 2 as long as x is smaller than 100

```
1    while x < 100
2        x = x + 2
3    endwhile
```

2. Jumps

if expression
elsif expression
> if the expression evaluates to zero or false, the execution of the script jumps to the next elsif or after the next **else** or **endif** at the same depth

The following script computes the preferred length of a bed for a person 'age' years of age

```
1    if age <= 3
2        length = 1.20
3    elsif age <= 8
4        length = 1.60
5    else
6        length = 2.00
7    endif
```

A variant spelling for **elsif** is **elif**.

3. Exercise 03

Extend the script from exercise 02 by. . .

(a) . . . extracting the name of all intervals using a for loop

(b) . . . measuring the duration of only for [a] using a jump

(c) . . . including a header with the information file name, label, duration (rounded to two decimal figures)