## LEK 2

## March 11, 2022

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[]: # LEK 2
     # Task: Name two types of loops and outline their general construction,
     → including their condition
     # 1 Loop (for)
     # For
           initialization of the starting value
           starting value is less than the stopping value
           one or more statements or actions
           increment the starting value
     # 2 Loop (while)
     # initialization of the starting value (predicate)
     # While the starting value is less than the stopping value
             some statements or action
             one or more statements or actions
             increment the starting value
[]: # Task: Wirte down the general construction of a branching, using if, elif, and
     ⇔else.
     # If (boolean condition) Then
         (consequent)
     # Elif (boolean condition) Then
           (consequent)
     # Else
           (alternative)
     # End If
[]: # Pseudocode
     # You want to sort your CD collection, consisting of 250 CDs, according to \Box
     \rightarrow genre and artist.
     # You have CDs of five different genres, Pop, Rock, Dance, Hip-Hop and Folk.
      \rightarrowFor each genre
     # there are seven different artists (KP1 to KP7, KR1 to KR7, etc...). Write the
     \hookrightarrow Pseudocode and
     # create a structogram for this problem. Don't forget to define possible_
      \rightarrow additional variables
     # beyond the array CDs.
```

```
# Define a CD collection cd_array with a size of 250.

# Define 35 empty subcollections or subarrays: pop_KP1 ... pop_KP7 and so on.

# Define an iterable subarray for genres: ["Pop", "Rock", "Dance", "Hip-Hop",□

→ "Folk"]; genres = 5

# Define an iterable subarray for artists: ["KP1", ..., "KP7", "KR1", ...□

→ "KR7", etc.]; artists = 35

# For each cd in cd_array:

# For each genre in genres:

# For each artist in artists:

# If cd is equal to genre and cd is equal to artist: Then

# append the cd to the predefined empty subarrays (i.e. pop_KP1,□

→ pop_KP2, etc.)
```