```
1: **************
 2:
     maXbox Starter 97
 3: ****************
 4:
 5:
    Operating System Services OSS
 6: -----
 7:
    Max Kleiner
 8:
 9:
    //2 Worte werden Dir im Leben Türen öffnen - "ziehen" und
    "stossen".
    Two words will open many doors for you in life - "pull" and
10:
    "push".
11:
12:
    This report will show a few important routines an operating
   system needs. An Operating System (OS) is an interface between a
   user and hardware. An OS is a software and an API which performs
   all the basic tasks like file management, memory management,
   process management, handling input and output including graphics,
   and controlling peripheral devices such as disk drives and
   printers.
13:
14:
15:
16:
17:
19:
20:
21: https://www.tutorialspoint.com/operating system/os quick quide.htm
22: https://github.com/maxkleiner/argos-translate
23: https://github.com/LibreTranslate/LibreTranslate#mirrors
24:
25: The best way to organize OS-routines is object oriented. A lot of
   OS-APIs are in fact object-oriented, for example everything that
   returns a handle. OOP has nothing to do with not being able to
   unsafe operations in your programming language. I think what you
   are really asking is: Can you write an OS in a language with
   automatic memory management and memory-safety?
26:
27: An example for returning a handle is the function
   GetForegroundWindow():
28:
29: function GetForegroundWindow: THandle;
31: And another is the counterpart to set the foreground but you need
   the handle:
32:
33: function SetForegroundWindow (hwnd : THandle) : BOOL
35: Makes the specified window the current foreground window and gives
   it the focus. This function should only be used with windows which
   your program owns. Of course this function should be used with
   caution, since the user usually doesn
   window to change unexpectedly. The function tells Windows to
   somehow draw the user's attention to the window, such as by
   flashing its icon in the taskbar. The function returns 1 if
   successful, or 0 if an error occured.
```

```
36:
37: function GetForegroundWindow: THandle
39: Finds which window is currently the foreground window. The
    foreground window is the window, usually at the top of the Z-order,
    with which the user is currently working with -- i.e., the window
   with the focus. The function returns 0 if an error occured, or the
   handle of the foreground window if successful.
40:
41: function GetWindowTextLength (hWnd : THandle) : DWORD;
42:
43: Returns the length in characters of a window's text. You can use
    this function in conjunction with GetWindowText to create a string
    just long enough to receive the text. However, this function does
   not include the terminating null character in the window's text in
   the character count. In some instances, this function might report
   a larger text length than actually exists; however, it will never
   report fewer than the actual number of characters.
   GetWindowTextLength does not work with controls owned by other
   programs. To get the window text length of these controls, use the
   WM GETTEXTLENGTH message instead.
44:
45: Example:
46:
47:
       writeln('GetActiveWindow '+itoa(GetActiveWindow));
48:
       writeln('getForegroundWindow: '+itoa(getForegroundWindow));
49:
       SetWindowText (GetActiveWindow, 'new text on window');
50:
       writeln('text length test: '+itoa(length('new text on
   window')));
51:
       // writeln(botostr(FlashWindow (GetActiveWindow, true)));
52:
       writeln('GetWindowTextLength:
    '+itoa(GetWindowTextLength(GetActiveWindow)));
53:
       >>> 18
54:
55: Explanation:
56:
57: function GetActiveWindow: THandle
58: Returns a handle to your program's currently active window. This
    only works with windows created by your application -- in other
   words, it won't find the active window of other programs. If your
   program is in the background, the function will get the window
   that would be active if the program were active. If an error
   occurs, or if there is no active window to your program, the
   function instead returns 0.
59:
60: function FlashWindow (hwnd : THandle; bInvert : DWORD): BOOL
61: Function FlashWindow( hWnd : HWND; bInvert : BOOL) : BOOL
62:
63: Flashes a window one step. Flashing is where the title bar of the
   window is switched from an active to inactive look (or vice versa)
    to get the user
   instead of just once. When you are done flashing, be sure to call
   the function again, this time with bInvert set to 0. The function
   returns 0 if the window's look was inactive before flashing, or 1
    if its look was active.
```

```
64:
 65: function SetWindowText (hWnd : THandle; lpString : PChar) : BOOL
 66: Changes the text of a given window. Although this function can set
     the text of regular windows owned by other programs, it cannot
     change the text of a control owned by a different program. To set
     the text of those controls, use the WM SETTEXT message instead.
 67:
 68: function CompareFileTime (const lpFileTime1: FILETIME; const
     lpFileTime2: FILETIME): long
 69:
 70: Compares two 64-bit file times.
 71:
 72:
 73:
 74:
 75:
 77:
 78:
 79: Next I want to show for each of the eleven topic a OS-routine:
 80:
 81: Table of contents
 82:
 83: 1. Communications functions *
 84:
 85:
     sendStringUsing WM COPYDATAklib (handle: THandle; data: string; msgIdentifier: in
 86:
 87: 2. Debugging functions *
 88:
 89:
        Function getPIDByProcessNameklib( nameProcess : string) :
     DWORD');
 90:
 91: 3. File Mapping functions *
 92:
 93:
        Procedure myMoveFileklib( sourceFileName : string;
     targetFileName : string)');
 94:
 95: 4. Handles and Objects functions *
 96:
 97:
        Function myFindWindowklib( className : string; captionForm :
     string) : THandle');
 98:
 99: 5. Hook functions *
100:
101:
        Function
     sendMemoryStreamUsing WM COPYDATAklib(handle:THandle;data:TMemoryStream):in
102:
103: 6. Memory Management functions *
104:
105:
        Function azuGetFileSize( FileName : string) : int64');
106:
107: 7. Processes and Threads functions *
108:
109:
        azuGetInetFile( const fileURL, FileName : String) : boolean');
```

```
110:
111: 8. Windows functions *
112:
113:
       Procedure azuChangeWallpaper (FName : string; IsTiled,
    IsStretch : Boolean)');
114:
115: 9. Shell Library functions *
116:
117:
       Function azuSHBrowseDialog( title : string; Handle : integer) :
    string');
118:
119: 10. Shell's Namespace functions *
120:
121:
        Function netShareklib( targetDir : string; netName : string;
    netPassw : string; grantAllPermissionToEveryoneGroup : boolean) :
    string');
122:
123: 11. Time functions *
124:
125:
       Function azuMsecToStr( Milli : Cardinal) : string');
126:
127: https://www.academia.
    edu/31112544/Work with microservice maxbox starter48.pdf
128:
129:
130:
                          .,,uod8B8bou,,.
131:
                 .., uod8BBBBBBBBBBBBBBBBRPFT?l!i:.
132:
             ,=m8BBBBBBBBBBBBBBBBRPFT?!|||||||||||
133:
             !...:!TVBBBRPFT||||||||!!.^^""'
             !....:!?||||!!!^^""
134:
135:
             I + I + I
136:
             137:
             ! . . . . . . . . . | | | |
138:
             ! . . . . . . . . . | | | |
139:
             !.....
                                             140:
             141:
             .....
142:
                                        .-!!||||
             .;......
       .,uodWBBBBb....||||
                                 .-!!|||||||
143:
144: !YBBBBBBBBBBBBBb..!|||:..-!!|||||!iof68BBBBb....
145: !..YBBBBBBBBBBBBBBB!!||||||!iof68BBBBBBRPFT?!::
146: !...YBBBBBBBBBBBBBBBBBBBBBBBBBBPFT?!:::::::
147: !.....YBBBBBBBBBBBBBBBBBBBBBRPFT?!::::;:!^"`;:::
148: !.....YBBBBBBBBBBBRPFT?!::::::::.^''...:::::;
                                                          iBBbo.
                                                         WBBBBbo.
     .....YBRPFT?!::::::::::::::::;iof68bo.
                                                           `YBBBP^'
150:
       ....,iof68888888888b.
         151:
           152:
             ....;iof68888888888888888888888888888888899fT!
153:
               ..:!88888888888888888888888888888899fT|!^"'
154:
                `' !!988888888888888888888899fT|!^"'
155:
                    !!888888888888899fT|!^"'
156:
                      !9888888899fT|!^"'
157:
158:
                       `!9899fT|!^"'
                         ` | ^ m t
159:
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160:
161:
162:
163:
                    |----|
      ()
164: | 64X4 | 64X4 | | | | | |
165: |-----| | | | | | | |
     166: | 64X4 | 64X4 | || | | | | |
    | | | I |
167: |-----|
                                        | ADV476KN50
   | ||| P |
168: | 64X4 | 64X4 | | TRIDENT | | |
                                        I 1-54BV 8940
   | ||| S |
169: |-----| || |TVGA
                       170: | 64X4
        | 64X4 | || |8800CS
171: |-----| || || 11380029| LOW->| /\ SUPER VGA
172: | 64X4 | 64X4 |
                           BIOS | \/
                                         (1)
          | | 1 |
173: |----|
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                    J
      1 5
174: | 64X4 | 64X4 | || | 2 |
                                  /\ SUPER VGA
176: | 64X4
          64X4 |
                                         (2)
177:
                           HIGH->|
178: | 64X4 | 64X4
179:
180:
                                TVGA-1623D
      () |
181:
                |LLLLLLLLLLLLLL
   |LLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLL| |
182:
183:
184:
185:
186:
187:
188: | [1] [2]
                                  [_] [_] [_
189: | [3] [4]
           [_][_][_]
190: | [5] [6]
           191: | [7] [8]
            192: | [9][10]
              193: | [11] [12]
```

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194: |
           195:
196:
197:
OOOkkkkkkkkkkkkkkkkkkxxxxxxxxxxxx
00000000kkkkkkkkkkkkkkkkkk
000000000000kkkkkkkkkkkkkkkkk
ck000000000000000000000kkkkkkkkkkkkk
202: kkxxkkxxkkkkkkk0000000000000000kkd'.lkk0kk00000000000x',
   203: xkkkkkkkk0000000000000000000kkx;..:k000000000000000000...
   204: dxkkkkokoooooooooooookkkkkkkkc.
                              ,x0k000000000000000c...
   205: ddxkk00000000000000000000kkkkkko'...
   206: oddxxkk0000000000000000000kkkxxd;...
   207: looddxxxk000000000000000000kxxkkxx:...;xkkkkk0000000001....,
   208: looodddxxkk00000000000000dlcloddl...
   209: loooddddxxxkkk000000000xc,,,:ccc'...
   210: oodddddxxxxxkkkk00000koc;..'',;,...
                               .;ooxkkk000000011.
   211: dxxxxxxxxkkk0000000kd;,,,''''......';;okk000000klc,.
   ...''...:dox0KKKKKKKKKKK000000000000000000
212: kkkkkxxxxxkk00000000ko;,,,'''''.....ck000000Kx'....',,::,',
   ,..10KKKKKKKKKKK00K00000000000000
213: xkkkkkkkkxxxkk000000xc,,,''','...,;:;.... .,000000K01.....,clll;,
   ,...'dKKKKKKKKKKKKKKKKKO00000000000
214: xxkkk0000kkkkkkkkkkkkkkd:,'',','...''
   d000KKK0c....;loooc;,...;kKKKKKKKKKKKKKKKKK0000000000
215: xkkk0000000000kkkkkxl,.',,,,
                                ...10KKKKKK0c....
   .'.',....'10KKKKKKKKKKKKKKKKK000000000
216: kk0000000000000kk0x:..',,,,
                                ...:OKKKKKKO:....',...
   .....d0kkkkkkkkkkkkkkkkk000000000
217: 000000000000000000d:'.';,,,,
                                ...'xKKKKKKO;...'....
   .....'; xKKKKKKKKKKKKKKKKKKO0000000
                                .,,, xKKKKKK0:..,;...'.
218: kk000000000000000kl;'...';;,...
   ....,;;,c000KKKKKKKKKKKKKKKKKK000000
219: k0000000000000000ko,.....''..,'.....',,;xKKKKKK0c..;;..,;.';,
   ',,.';;;'lokkkkkkkkkkkkkkkkkkk00000
220: 00000000000000000000000x;...
                    .'...'';::,.''.';;::xKKKKKKO;.;cc,
   ';:;ldl;;;'';cc,cOKOKKKKKKKKKKKKKKKKKO0000
221: 000000000000000000kd:. .',,..:lllc,':;'..,
   ;xKK0000d...':lc::ldxdo:cl:::,,:x0000000KKKKKKKKKKK00000
222: 0000k0000000000kkk0x:. .,,'';llllc;,;,....,
   xKOld0k:....;od:cxxdddlcddc;'''10000000KKKKKKKKKKKK0000
```

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223: 0000kkkkkkkkkk0000kk:. ....';;;;;,,,. ....'dKkldOk,
                                                 .,::;ldl;,
    :coolc;'..:k00000KKKKKKKKKKKKK00000
224: 0000kkkxxxxxxkkkkkc. ....'''.....',...okl:cco,
                                                ';;;;cl,
    ...;llc;,.,,lOKKKKKKKKKKKKK000000000
225: kkkkkOkkkxxxddxxxxd,.
                      ...,...;'. .,,,cl:;;::'. .';cl::l'
    ..,cloc; '';; xKKKKKKKKKKKKK000000000
226: kkkkkk00kxxdddddd:. ..';.....';'....',c,.,::;....,ldocl'
    ..':ldoc;';cco0KKKKKKKKKKKKKKK000000
                      ...,'......'.'c:...';l:...,cdocc,
227: 0000kkxxkxxxxddddl.
    .';,:lddl:,,:;;xKKKKKKKKKKKKKK000000
228: 000000kxxxxxxxxxx:
                     .....'...';lc'.',',cl,...
    229: xkkkkkkxxxxxxxxx, ...........''''...';;::,.;ll:;:c,..:llc:coc,
    :ol:clcc,':c;;kKKK000000kkkk000kkk
230: dddxxxxxxxxxxkl....'''...,'..';....colc:',llloc;;,
    231: odddddxxxxkkkOOk:.....'',llc,.;;;loo:..::col:clllllccc',
    ooclxxxocdoldxxol:,cccclk0000kkkkkk000000ko
232: dxxkk00000000Kk'.....:oo:::'':odlcc'.;::;;ldxxxddoc,
    .'llcxkxxxocldkxkxo:';::c:o000000000000000k:.
233: xkk000KKKKKKKKKo. ...'cc,.',''cl;'.'..;:,,
    lxxocllodd; ..lclxollol; cxollodc.':;;; c000KKKK00000k00xoc
234: 00000KKKKKKKK0: ....,'....';,.. ...''.:ooc;;;;:loc..:;:l::;;;,
    :1::::;..;,',:xKKKK00000kk00kkxx
235: 00000KKKK0000Kx'...'.............;'.;l:,,;;;,;c;..:;;,
    ''.'',:,....;;'.'c0000000000000kkkk
236: OOkOO00000000:....'....
                                  .'c;',;'...'...'. .lo;,,
    .....';,.....:1;'.,x0000000000000000
237: kkk0000KK00000.....
                                  .':;'','...'''....co:,
                            . . . .
    238: xxk00KKKKK000: .. ...
                                  .';,.',,'...'''.....co:,
    '...., k0000000000000000
239: k0000000000d. .....
                                 .,,'.,;'...'''....;c;,
    '.....',.... . .,,'...10000000000000k
240: k000kxxk0000c. ...'.
                                  .:c,.,,'....''...
    .:1:;'.....k00000000000kk
241: kkkkxxk000KO, ..... ;;,.';,'...',,,. :1:';;,.,
    ;...';,.'.. ':;...,x000000000kkkkk
242: ddddxkk00000. ..... :o:,;,.,
    ;...':;.''. .;;....10000000kkkkkkk
243: ooddxk00000: ....'. ...
                                 '....','...', k000kkkkkkkkkk
245: ooddddddxx:...,clc:'. ...... .,,.',....;;..,;';,
    ...,cc:,....''...'.:xkkkkxxxxxxx
246: loooooddxl. ..,:lc,. .....
                     .....lkkxxxxxxxxdd
    1,,;;.
....; dxxxxxxxdddd
248: ,'';cloo:. .'';:;'..
                   .cxdddddooooo
249: ,',;:cll, .,'',;'..
                       ,oooolllllcc
250: ,,,,;cc.
                       .clllcccccc
```

```
251: ',,;;:c,. .....'..
           .;;. .;1111111111
252: ;,,:ccc' ..,'',;'
                 'clcclcccc
            ..;:.
253: ;'';cc;. ..''',;.
   ,;c;'.....',;;,;:cc:
                   ...,:''::',;'....;'.
254: ,',;::,. ..'..,,'.
   .';;lddo:;,,,''',,,',.....'..',,,,
                .,;;.,dld0olkdcoo:......clc,.....'cdol,
   ';:ldooo:,,;::::;,';....
                   1;,,,...
                .,:'....cd'..,;;;,.
256: ,'.,;'. ... ....
                               .cc;,...'
   .;;cloc:;,,:llllc;;:,......',,,'.
                      ,;. .. <sup>11</sup>...
                                .C:,,.
   ;:11:;;,,:cccc:::,....
                     259: ..
   ....,,;;::::::clooc:::cll::cc',c:;;:;:ll;...
260: .
   ;;,.....
262: Free and Open Source Machine Translation API, entirely self-
   hosted. Unlike other APIs, it doesnt rely on proprietary providers
   such as Google or Azure to perform translations. Instead, its
   translation engine is powered by the open source Argos Translate
   library. You can use the LibreTranslate API using many language
   bindings.
263:
264:
   .....',,;:::cloooooooooolllc:::;,,
   1
265: .....'',
   :ccooodddddxxxddddddoooooooolllc:;,
   11.........
266: ....';
   :loddddddooodddxxxddddddooooooollolooolc::;'...........
267: .....',
  ;codxdoddddooooodddddddoooooooooooooooollllc:;'.............
' . . . . . . . . . . . . . . . . . .
270: ....';
   looooooloooooooodxkxxxkkdddddddoooollooooollodddoooollllllc:
272: .....':ooooooollodddoodddxxdddxxddddddddoooooollollllllccccllloddx
273: .....,
   275: .....,
```

```
276: ....;
277: ....;
279: ..,
282: ,
dkxxddxxxxddddddxxdddooooollooollooolcccccc::::::;;:::::cc:::::
::;
291: kkxxxxddddddddoolccc::ccclloooooooolccccclolllllcc::::::ccloodxddoool
::::::;;;;;
295:
296: .:kK00kxxkkxdxddoooooolllcccccclllllllllooooollc:::::::cccccclloolooooooo
298: ..,
o0000kxxxxxddddooolllccccllccclooooodoooloollcllooollooool
300: ....,
```

```
301: .....
  303: ....,
  305: ........
  308: ....';
  310: .....';
  coxkk0000kkkkkkkkkkxxxxxxxxxddooodxxxxxxkkkkxdoc; '......
311: .....',
  :codxk00000000000kkkkkkkkxxddddxkk000kkxdlc:,
312:
313:
314:
  >>>
315:
316:
           od#HMM6&*MMMH::-
                  `"'-?Hb
        dHMMMR??MMM? ""|
317:
318:
                    `*HMb.
      .~HMMMMMMMHMMM#M?
     . / ? HMMMMMMMMM" * " " "
319:
                      &MHb.
320:
     ' | MMMMMMMMMM '
                      *MHM\
321:
      | MMM ' MMHHM ' '
                       .MMMHb
322:
                      TMM MMH
      9HMMP
          .Hq,
323:
      | MM\, H-""&&6\
                       dMMMMMM d
       `""HH#,
324: |
                      - MMMMMMI
325:
         HoodHMM###.
                       <sup>^</sup>9MMMMMH
                        `*"?HM
326:
           .MMMMMM##\
          , HMMMMMMMMMO\.
327:
                          l M
328:
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                          M
329:
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                          ΙH
330:
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                          . M |
331:
             MMMMMMMMM*
                          ΙP
             MMMMMMMT" 
                         , Н
332:
333:
            MMM'MMH?
334:
            | MMMH # "
            |MMP |
335:
336:
             HM: .-
337:
338:
            -#odMM\
                00:
```

```
339:
     Argos Translate uses OpenNMT for translations, SentencePiece for
340:
    tokenization, Stanza for sentence boundary detection, and PyQt for
    GUI. Argos Translate can be used as either a Python library,
    command-line, or GUI application. LibreTranslate is an API and web-
    app built on top of Argos Translate.
341:
342: procedure SIRegister KLibWindows (CL: TPSPascalCompiler);
343: begin
     //CL.AddDelphiFunction('Procedure downloadFile(info:
     TDownloadInfo; forceOverwrite: bool)');
345: Function getFirstPortAvaliableklib( defaultPort : integer; host :
     string) : integer');
346:
     Function checkIfPortIsAvaliableklib( host : string; port : Word)
     : boolean');
347:
    Function checkIfAddressIsLocalhostklib( address : string) :
    boolean');
348:
     Function getIPFromHostNameklib( hostName : string) : string');
     Function getIPklib : string');
350:
     Function checkIfRunUnderWineklib : boolean');
351:
     Function checkIfWindowsArchitectureIsX64klib : boolean');
352:
       CL.AddTypeS('TPIDCredentials', 'record ownerUserName : string;
    domain : string; end');
       CL.AddTypeS('TWindowsArchitectureklib', '( WindowsX86,
353:
    WindowsX64 )');
354:
     Function getWindowsArchitectureklib : TWindowsArchitectureklib');
355: Function checkIfUserIsAdminklib : boolean');
356:
     Function IsUserAnAdminklib : boolean');
357:
       CL.AddTypeS('TShowWindowType','( SW HIDE, SW SHOWNORMAL,
     SW NORMAL, SW S'
       +'HOWMINIMIZED, _SW_SHOWMAXIMIZED, _SW_MAXIMIZE,
358:
     _SW_SHOWNOACTIVATE,
                        _SW_SHO'
359:
       +'W, SW MINIMIZE, SW SHOWMINNOACTIVE, SW SHOWNA, SW RESTORE,
     SW SHOWDEFAULT, SW FORCEMINIMIZE, SW MAX )');
360:
     Procedure openWebPageWithDefaultBrowserklib( url : string)');
     Function shellExecuteOpenklib( fileName : string; params :
     string; directory : string; showWindowType : TShowWindowType;
    exceptionIfFunctionFails : boolean) : integer');
     Function shellExecuteExeAsAdminklib( fileName : string; params :
    string; showWindowType : TShowWindowType; exceptionIfFunctionFails
     : boolean) : integer');
     Function shellExecuteExeklib( fileName : string; params : string;
     showWindowType : TShowWindowType; exceptionIfFunctionFails :
    boolean; operation : string) : integer');
364: Function myShellExecuteklib (handle: integer; operation:
     string; fileName : string; params : string; directory : string;
     showWindowType : TShowWindowType; exceptionIfFunctionFails :
    boolean) : integer');
     Function shellExecuteExCMDAndWaitklib( params : string;
     runAsAdmin : boolean; showWindowType : TShowWindowType;
    exceptionIfReturnCodeIsNot0 : boolean) : LongInt');
     Function shellExecuteExAndWaitklib( fileName : string; params :
     string; runAsAdmin : boolean; showWindowType : TShowWindowType;
    exceptionIfReturnCodeIsNot0 : boolean) : LongInt');
367:
     Function
    executeAndWaitExeklib(fileName:str;params:str;exceptionIfReturnCodeIsNot0:
```

```
368: Function netShareklib( targetDir : string; netName : string;
     netPassw : string; grantAllPermissionToEveryoneGroup : boolean) :
    string');
369:
     Procedure addTCP IN FirewallExceptionklib(ruleName:string;
    port:Word;description:string;grouping:string; executable: string)
      Procedure deleteFirewallExceptionklib( ruleName : string)');
371:
      // CL.AddTypeS('TExplicitAccess', 'EXPLICIT ACCESS A');
372:
     Procedure
    grantAllPermissionsNetToTheObjectForTheEveryoneGroupklib( myObject
     : string)');
373:
     Procedure grantAllPermissionsNetToTheObjectForTheUsersGroupklib(
    myObject : string)');
374:
     Procedure grantAllPermissionNetToTheObjectklib(
    windowsGroupOrUser:string; myObject:string);
     Procedure grantAllPermissionsToTheObjectForTheEveryoneGroupklib(
    myObject : string)');
     Procedure grantAllPermissionsToTheObjectForTheUsersGroupklib(
376:
    myObject : string)');
377:
     Procedure grantAllPermissionsToTheObjectklib (windowsGroupOrUser:
     string; myObject: string);
      Procedure grantAllPermissionsToTheObjectForTheEveryoneGroup2klib(
    myObject : string)');
     Procedure grantAllPermissionsToTheObjectForTheUsersGroup2klib(
    myObject : string)');
     Procedure grantAllPermissionsToTheObject2klib(
    windowsGroupOrUser: string; myObject:string);
     Function checkIfWindowsGroupOrUserExistsklib( windowsGroupOrUser
     : string) : boolean');
     Procedure createDesktopLinkklib(fileName:string;
    nameDesktopLink:string;description:string);
     Function getDesktopDirPathklib : string');
384:
     Procedure copyDirIntoTargetDirklib(sourceDir:string;targetDir
    string; forceOverwrite:boolean);
     Procedure copyDirklib( sourceDir : string; destinationDir :
     string; silent : boolean)');
386:
      Procedure createHideDirklib( dirName : string; forceDelete :
    boolean)');
     Procedure deleteDirectoryIfExistsklib( dirName : string; silent :
    boolean)');
     Procedure myMoveFileklib( sourceFileName : string; targetFileName
     : string)');
     Procedure createEmptyFileIfNotExistsklib( filename : string)');
390:
     Procedure createEmptyFileklib( filename : string)');
     Function checkIfIsWindowsSubDirklib( subDir : string; mainDir :
     string) : boolean');
392:
     Function getParentDirklib( source : string) : string');
     Function getValidFullPathInWindowsStyleklib( path : string) :
393:
    string');
394:
     Function getPathInWindowsStyleklib( path : string) : string');
     Function getStringWithEnvVariablesReadedklib( source : string) :
395:
     string');
396:
     Function setProcessWindowToForegroundklib( processName : string)
     : boolean');
    Function getPIDOfCurrentUserByProcessNameklib( nameProcess :
     string): DWORD');
```

```
Function getWindowsUsernameklib : string');
399:
     Function checkUserOfProcessklib ( userName : String; PID : DWORD)
     : boolean');
400:
     Function getPIDCredentialsklib( PID : DWORD) : TPIDCredentials');
401:
     Function getPIDByProcessNameklib( nameProcess : string) : DWORD');
402:
     Function getMainWindowHandleByPIDklib( PID : DWORD) : DWORD');
403:
     Procedure closeApplicationklib( handle : THandle)');
404:
     Function
     sendMemoryStreamUsing WM COPYDATAklib(handle:THandle;data:TMemoryStream):in
     Function
     sendStringUsing WM COPYDATAklib (handle: THandle; data: string; msqIdentifier: in
     Procedure mySetForegroundWindowklib( handle : THandle)');
407:
     Function checkIfWindowExistsklib( className : string; captionForm
     : string) : boolean');
     Function myFindWindowklib ( className : string; captionForm :
     string) : THandle');
     Function checkIfExistsKeyIn HKEY LOCAL MACHINEklib( key : string)
409:
     : boolean');
410:
     Procedure waitForMultipleklib( processHandle: THandle; timeout:
     DWORD; modalMode: boolean)');
      Procedure waitForklib ( processHandle : THandle; timeout : DWORD;
     modalMode : boolean)');
     Procedure raiseLastSysErrorMessageklib');
     Function getLastSysErrorMessageklib : string');
414:
     Function getLocaleDecimalSeparatorklib : char');
415:
     Procedure terminateCurrentProcessklib(exitCode:
     Cardinal; raiseExceptionEnabled: boolean) ');
416:
     Procedure
     myTerminateProcessklib (processHandle: THandle; exitCode: Cardinal; raiseExcept:
417:
      //Function fixedGetNamedSecurityInfo( pObjectName : LPWSTR;
     ObjectType : SE OBJECT TYPE; SecurityInfo : SECURITY INFORMATION;
     ppsidOwner, ppsidGroup : PPSID; ppDacl, ppSacl : PPACL; var
     ppSecurityDescriptor : PSECURITY DESCRIPTOR) : DWORD');
418: end;
419:
420:
421: procedure SIRegister AzuliaUtils(CL: TPSPascalCompiler);
422: begin
       CL.AddTypeS('azucharSet', 'set of char');
423:
424:
       SIRegister IShellLink(CL);
425:
       SIRegister TBrowseForFolderDialog(CL);
426:
       SIRegister TSystemRegistry(CL);
427:
       SIRegister TAzuliaStrings (CL);
       CL.AddTypeS(TLogFunct','Function( const path: string;const SRec:
428:
     TSearchRec): Boolean');
       SIRegister TAzuliaFiles(CL);
429:
       SIRegister TAzuliaSpeaker(CL);
430:
       SIRegister TAzuliaDisk(CL);
431:
432:
       SIRegister TAzuliaHTML(CL);
433:
       CL.AddTypeS('GrabType', '( GTSCREEN, GTWINDOW, GTCLIENT )');
       CL.AddClassN(CL.FindClass('TOBJECT'), 'EInvalidDest');
434:
       CL.AddClassN(CL.FindClass('TOBJECT'), 'EFCantMove');
435:
436: Function azuBoolToStr( value : boolean) : string');
437: Procedure azuChangeWallpaper (FName: string; IsTiled, IsStretch
     : Boolean)');
```

```
438:
     Function azuDoIExist( WndTitle : string) : Boolean');
439:
     Procedure azuAlert( Text : string)');
440:
     Procedure azuTileImage( SourceImage, DestImage : TImage)');
441:
     Function azuIncChar( iX : Char) : Char');
442:
     Function azuDecChar( iX : Char) : Char');
      Procedure azuSaveForm( F : TForm; Filename : string)');
443:
444:
     Procedure azuLoadForm( F : TForm; Filename : string)');
445:
     Function azuToggleBool( totoggle : bool) : bool');
     Function azuremoveTrailingChars( const s : string; chars :
446:
     azucharSet) : string');
447:
     Function azuremoveLeadChars( const s : string; chars :
     azucharSet) : string');
448:
      Function azuremoveChars( const s : string; chars : char) :
     string');
449:
     Procedure azuDelay( MSecs : Integer) ');
450:
     Function azuSHBrowseDialog( title : string; Handle : integer) :
     string');
451:
     Procedure azuregisterfiletype (Extention, REGDesc, UserDesc, Icon,
      Appl: string)');
452:
     Procedure azuRemoveFileType( Extention, RegDesc : string)');
     Procedure azuGetFunctionNamesFromDLL( DLLName : string; List :
     TStrings)');
454:
     Procedure azuSaveListViewToFile( AListView : TListView; sFileName
     : string) ');
     Procedure azuLoadListViewToFile( AListView : TListView; sFileName
     : string)');
     Procedure azuLoadCSV( Filename : string; sg : TStringGrid)');
457:
     Function azuJPEGDimensions (Filename: string; var X, Y: Word):
     boolean');
458:
     Procedure azuResizeImage( FileName : string; MaxWidth :
     Integer)');
     Function azuSaveJPEGPictureFile (Bitmap: TBitmap; FilePath,
     FileName:string;Quality:Int): Bool
     Function azuLoadJPEGPictureFile( Bitmap : TBitmap; FilePath,
     FileName : string): Boolean');
      Procedure azuSmoothResize( Src, Dst : TBitmap)');
     Function azuMsecToStr( Milli : Cardinal) : string');
462:
463:
      Procedure azuDirToStrings(APath: string; AStrings:TStrings;
     WithExt, WithPath: boolean) ');
      Procedure azuSetWallPaper( ImageFileName : string; IsTiled :
     boolean)');
465:
     Function azuGetFileSize( FileName : string) : int64');
466:
     Function azuGetExeByExtension( sExt : string) : string');
     Function azuRefreshScreenIcons : Boolean');
467:
468:
     Function azuIndexToColor( AIndex : integer) : TColor');
469:
     Function azuColorToIndex( AColor : TColor) : integer');
470:
     Function azuTitleCase( Text2 : string) : string');
471:
     Function azuToggleCase( Text2 : string) : string');
472:
      Function azuSentenceCase( Text2 : string) : string');
473:
      Procedure azuGrabScreen( bm : TBitMap; gt : GrabType)');
474:
      Procedure azuSaveStringGrid( StringGrid : TStringGrid; FileName :
     String) ');
      Procedure azuLoadStringGrid (StringGrid : TStringGrid; FileName :
     String)');
      Function azuGetInetFile( const fileURL, FileName : String) :
     boolean');
```

```
Procedure azuRunOnStartup( sProgTitle, sCmdLine : string;
     bRunOnce : boolean)');
478:
      Procedure azuRemoveOnStartup( sProgTitle : string)');
      CL.AddConstantN('SInvalidDest', 'String').SetString( 'Destination
479:
     %s does not exist');
      SFCantMove','String().SetString( 'Cannot move file %s');
481:
      AzuMsg1','String').SetString( 'File "%s" does not exist!');
482: AzuMsg2', 'String'). SetString( '"%s" is not a ListView file!');
      sr WindowMetrics','String').SetString( 'Control
483:
     Panel\Desktop\WindowMetrics\');
484:
      sr ShellIconSize','String').SetString( 'Shell Icon Size');
485: end;
486:
487:
488:
      This is what we want to use in maxbox:
489:
490:
      const res = await fetch("https://libretranslate.com/translate", {
491:
      method: "POST",
492:
      body: JSON.stringify({
493:
       q: "Hello!",
494:
       source: "en"
495:
      target: "es"
496:
497: headers: { "Content-Type": "application/json" }
498:
499:
     console.log(await res.json());
500:
501: JSON.stringify() converts a value to JSON notation representing
     it: If the value has a toJSON() method, its responsible to define
     what data will be serialized.; Boolean, Number, and String objects
     are converted to the corresponding primitive values during
     stringification, in accord with the traditional conversion
     semantics.
502:
503:
      Then we use our Com-Object from OleVariant at late binding:
504:
505: function getPostTranslateLibre3(feedstream, fromlang, tolang:
     string): string;
506: var
507:
       Url, aAPI KEY, source: string;
508:
       jo, locate: TJSONObject;
509:
      httpReg, hr: Olevariant;
510:
       strm: TStringStream;
511: begin
512:
       httpReq:= CreateOleObject('WinHttp.WinHttpRequest.5.1');
513:
       // Open the HTTPs req. connection.
514:
       try
515:
         hr:= httpReq.Open('POST',
     'https://libretranslate.pussthecat.org/translate',false);
516:
         httpReq.setRequestheader('user-agent',CUSERAGENT );
517:
         httpReq.setRequestheader('content-type','application/x-www-
     form-urlencoded');
518:
         if hr = S OK then HttpReq.Send('q='+HTTPEncode(feedstream)+
519:
     '&source='+fromlang+'&target='+tolang);
```

```
520:
         If HttpReq.Status = 200 Then
521:
            result:= HttpReq.responseText
522:
         Else result:= 'Failed at getting
     response: '+itoa (HttpReq.Status) +HttpReq.responseText;
523:
           //writeln('debug response '+HttpReg.GetAllResponseHeaders);
524:
       finally
525:
         httpreq:= unassigned;
526:
       end;
527: end;
528:
529: For example from en to de:
      Germany's conundrum over its ties with USA
      Deutschlands Rätsel um seine Beziehungen zu den USA
531:
532:
533: writeln(getPostDetectLang('con mucho cuidado'));
       [{"confidence":94.0,"language":"es"}]
535:
536: writeln(utf8toAnsi(getPostTranslateLibre3('It is important to note
     this does nothing to prevent someone from making an API request
     with your key, ', 'en', 'es'))); //}
         writeln(utf8toAnsi(getPostTranslateLibre3('Germany''s
537:
     conundrum over its ties with USA,',
538:
                                                              'en',
     'it')));
539:
         writeln(utf8toAnsi(getPostTranslateLibre3('Germany''s
     conundrum over its ties with USA,',
540:
                                                              'en',
     'fr')));
541:
         writeln(utf8toAnsi(getPostTranslateLibre3('Conundrum', 'en',
     'de')));
542:
543: {"translatedText":"Es importante se\u00f1alar que esto no hace
     nada para evitar que alquien haga una solicitud de API con su
     clave,"}
544: {"translatedText":"Il conundrum tedesco sui suoi legami con gli
     Stati Uniti,"}
545: {"translatedText":"Le conundrum allemand sur ses liens avec les
     USA,"}
546: {"translatedText":"Conundrum"}
547:
548: What I did not resolve is the hex unicode: \u00f1 in Es importante
     señalar que esto no hace
549: https://www.compart.com/en/unicode/U+00F1
550: U+00F1 is the unicode hex value of the character Latin Small
     Letter N with Tilde. Char U+00F1, Encodings, HTML Entitys:ñ,ñ,ñ,
     UTF-8 (hex), UTF-16 (hex), UTF-32 (hex).
551: This question relates to versions of Delphi below 2009 (ie without
     Unicode support built in). I have a specification that requires me
     to transmit a Unicode encoded string over a TCP connection.
552: So the last word seems type unknown to argos: Definitions of
     conundrum
553: noun 1 a confusing and difficult problem or question.
554: "one of the most difficult conundrums for the experts"
555: Translations of conundrum - Part of speech Translation Reverse
     translations Frequency
```

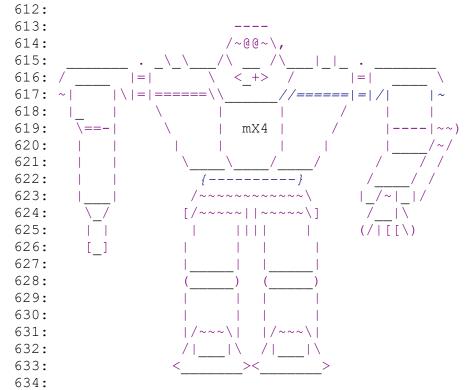
```
556: help outline:
557: noun das Rätsel as puzzle, mystery, riddle, enigma, conundrum,
     problem
558:
559: LibreTranslate supports per-user limit quotas, e.g. you can issue
     API keys to users so that they can enjoy higher requests limits
     per minute (if you also set --req-limit). By default all users are
     rate-limited based on --req-limit, but passing an optional api key
     parameter to the REST endpoints allows a user to enjoy higher
     request limits.
560:
561:
      Then we add some business goal to the service:
562:
      - a language translator/detector to fullfill a sentiment cluster
     analysis
563:
564:
      The idea behind POST microservices is that some types of
     applications become easier to build and maintain when they are
     broken down into smaller, composable pieces which work together.
     Each component is developed separately, and the application is
     then simply the sum of its constituent components.
565:
      For example we get a list of the astronauts currently in space:
566:
567:
      //https://www.codeproject.com/Articles/5319146/How-to-Use-Rest-
     API-with-Python
     procedure getAstronautAPI;
568:
569:
      var res: string; i:integer;
570: begin
571:
      with TWinApiDownload.create do begin
572:
         Useragent:= 'Mozilla/4.0 (compatible; MSIE 7.0; Windows NT
     5.1';
573:
         Url:= 'http://api.open-notify.org/astros.json';
574:
         Download1 (res);
575:
         with TJSONObject.create4(res) do begin
576:
           //writeln(tostring2(2,3))
577:
           if getstring('message') = 'success' then
578:
             for i:= 0 to getJSONArray('people').length-1 do
579:
     writeln(itoa(i)+':'+getJSONArray('people').getJSONObject(i).getString('name
580:
           free;
581:
         end;
582:
        free; //ApiDownload
583:
       end;
584:
      end;
585:
586: >>>
587:
     0:Raja Chari
588:
      1:Tom Marshburn
589:
      2:Kayla Barron
590:
      3:Matthias Maurer
591:
      4:Oleg Artemyev
      5:Denis Matveev
592:
593:
      6:Sergey Korsakov
594:
      7:Michael Lopez-Alegria
595:
     8:Larry Connor
```

```
596:
     9:Mark Pathy
597: 10:Eytan Stibbe
598:
599: Source of the translate script at:
600: http://www.softwareschule.ch/examples/translator.txt
601:
602:
         • Request Headers°
         • Getting Cookie information°
603:
         • Request body°
604:
605:
         • Response headers°
         • Response body°
606:
607:
608: Conclusion:
```

609: The idea of separating applications into smaller parts is nothing new; there are other programming paradigms which address this same concept, such as Service Oriented Architecture (SOA) or POST-Services. Translation is the written transfer of a message from one language to another. Interpretation refers to oral translation, but can also mean interpreting the meaning and intention of the message. Translation is made from the source language to the target language.

610: Simplify API development for users, teams, and enterprises with the Swagger open source and professional toolset. Find out how Swagger can help you design and document your APIs at scale.

611: Each service should be independently developed **and** deployed. No coordination should be needed **with** other service teams **if** no breaking API changes have been made. Each service **is** effectively **it**'s own product with it's own codebase **and** lifecycle.



635: A microservice architecture shifts around complexity. Instead of a single complex system, you have a bunch of simple services with complex interactions.

636:

```
637:
       Doc:
       https://rapidapi.com/hub
638:
639:
       http://text-processing.com/demo/sentiment/
640:
       https://opensource.com/resources/what-are-microservices
641:
       https://sourceforge.net/projects/alcinoe/
642:
       http://fundementals.sourceforge.net/unicode.html
643:
     http://www.softwareschule.ch/examples/1142 list collections pydemo42.txt
644:
     http://www.softwareschule.ch/examples/1145 271 closures study op sys tut
645:
646: https://github.com/LibreTranslate/LibreTranslate#mirrors
647:
648:
649:
650:
651:
652:
653:
654:
655:
656:
657:
658:
659:
660:
661:
662:
663:
664:
665: namespace RegExApplication
666:
667:
             class Program
668:
669:
                 private static void showMatch(string text, string expr)
670:
671:
                      int arex = 46;
672:
                      Console.WriteLine("The Expression: " + expr + '
     '+arex);
                      MatchCollection mc = Regex.Matches(text, expr);
673:
674:
                      foreach (Match m in mc)
675:
676:
                          Console.WriteLine(m);
677:
678:
679:
                 static void Main(string[] args)
680:
681:
                      string str = "A Thousand Splendid Suns";
682:
                      Console. WriteLine ("Matching words that start with
     'S': ");
683:
                      showMatch(str, @"\bS\S*");
684:
                      FileIOApplication.FileProgram.Mainfiler();
685:
                      BinaryFileApplication.Program.Mainbinary();
686:
                      WindowsFileApplication.Program.Mainwin();
687:
     DelegateAppl.BoilerEventAppl.RecordBoilerInfo.Mainboiler();
```

```
688:
                      //DelegateAppl.TestDelegate.MainDelegate(["Arg 1",
               "Arg 3"]);
689:
                      //
                          DelegateAppl.TestDelegate.MainDelegate("Arg
     3");
690:
691:
                      //System.Windows.Input.ICommand.Equals.
692:
693:
                      Console.ReadKey();
694:
                      foreach (var arg in args)
695:
696:
                           Console. WriteLine (arg);
697:
698:
                      /* for(int i = 0; i < args.length; i++) {
699:
                           Console.WriteLine(args[i]);
700:
                           }
701:
                      Console.ReadKey();*/
702:
                      //205
703:
                  }
704:
              }
705:
         }
706:
707: def generate power func(n):
708:
         print "i\overline{d}(n): \sqrt[8]{X}" % id(n)
709:
         def nth power(x):
710:
              return x**n
711:
         print "id(nth power): %X" % id(nth power)
712:
         return nth power
713:
714: >>> raised to 4 = \text{generate power func}(4)
715: id(n): CCF7DC
716: id(nth power): C46630
717: >>> repr(raised to 4)
718: '<function nth power at 0x00C46630>'
719:
720: def generate power func(n):
721:
         print "id(n): %X" % id(n)
722:
         def nth power(x):
723:
              return x**n
724:
         print "id(nth power): %X" % id(nth power)
725:
         return nth power
726:
727: >>> raised to 4 = \text{generate power func}(4)
728: id(n): CCF7DC
729: id(nth power): C46630
730: >>> repr(raised to 4)
731: '<function nth power at 0x00C46630>'
732:
733: maXbox4
734: Total of Function Calls: 35771
735: SHA1: 4.7.6.10 30bace36b037686509bbbee256e22daa52b3df70
736: CRC32: 500F69DD: 31.8 MB (33,400,088 bytes)
737: ZIP maxbox4.zip SHA1: 9DA15BFD72471108FCF746669C6AFD96E9A0E54C
738:
```