```
AppendTo[$Path, "c:\\ewa\\ewanb"];
```
⌊dołącz na···⌋ ⌊domyślna lista katalogów⌋

`%1`

```
{C:\Program Files\Wolfram Research\Mathematica\11.0\SystemFiles\Links,
 C:\Users\Ewa\AppData\Roaming\Mathematica\Kernel,
 C:\Users\Ewa\AppData\Roaming\Mathematica\Autoload,
 C:\Users\Ewa\AppData\Roaming\Mathematica\Applications,
 C:\ProgramData\Mathematica\Kernel, C:\ProgramData\Mathematica\Autoload,
 C:\ProgramData\Mathematica\Applications, ., C:\Users\Ewa,
 C:\Program Files\Wolfram Research\Mathematica\11.0\AddOns\Packages,
 C:\Program Files\Wolfram Research\Mathematica\11.0\SystemFiles\Autoload,
 C:\Program Files\Wolfram Research\Mathematica\11.0\AddOns\Autoload,
 C:\Program Files\Wolfram Research\Mathematica\11.0\AddOns\Applications,
 C:\Program Files\Wolfram Research\Mathematica\11.0\AddOns\ExtraPackages,
 C:\Program Files\Wolfram Research\Mathematica\11.0\SystemFiles\Kernel\Packages,
 C:\Program Files\Wolfram Research\Mathematica\11.0\Documentation\English\System,
 C:\Program Files\Wolfram Research\Mathematica\11.0\SystemFiles\Data\ICC,
 c:\ewa\ewanb}
```

```
<< tranr.m
```

```
?? tranr
```

Global`tranr

```
tranr[d_, k_, t_] := Module[{bd, cd, ii, j, jj, tt, KM, km, be, kb}, bd = 1;
   tt := t;
   xx = {1};
   Do[bd = 2^ii - bd + 1;
     AppendTo[xx, 1], {ii, d - 1}];
   cd = bd 2^-d;
   km = {};
   Do[kb = Floor[(tt - cd/2^d) 2^d] + 1;
     tt = 2^d (tt - cd/2^d - (kb - 1) 2^-d);
     If[kb == 2^d, kb = 0, Null];
     If[Floor[kb/2] < kb/2, tt = 1 - tt, Null];
     AppendTo[km, kb], {j, k}];
   Do[KM = km[[k - j + 1]];
     ww = {};
     Do[If[KM < 2^(d-jj), be = 0, be = 1];
       AppendTo[ww, be];
       KM = KM - be 2^(d-jj);
       If[be == 1, KM = 2^(d-jj) - KM - 1, Null];, {jj, d}];
     Do[xx[[d - jj + 1]] = 1/2 - (1/2 - ww[[jj]]) xx[[d - jj + 1]], {jj, d}];, {j, k}];
   xx]
```

```
<< Kodr.m
```

In[67]:=

?? Kodr

Global`Kodr

```
Kodr[d_, k_, x_List] := Module[{xx, bd, cd, ii, jj, KM, km, kb, be, tt}, bd = 1;
    xx = x;
    beta = {};
    KM = {};
    Do[bd = 2^ii - bd + 1, {ii, d - 1}];
    cd = bd 2^-d;
    tt = 1 - cd;
    Do[beta = {};
     Do[xi = xx[[ii]];
       If[xi < 1/2, be = 0, be = 1];
       AppendTo[beta, be];
       xx[[ii]] = (xi - 1/2)/(-1/2 + be), {ii, d}];
     ww = 0;
     kb = 0;
     Do[be = beta[[d - ii + 1]];
       If[be + ww == 1, kb = kb + 2^(d-ii), Null];
       ww = Abs[be - ww], {ii, d}];
     If[kb == 2^d, kb = 0, Null];
     AppendTo[KM, kb], {jj, k}];
    Do[kb = KM[[k - jj + 1]];
     If[Floor[kb/2] < kb/2, tt = 1 - tt, Null];
     tt = (cd + (kb - 1) + tt)/2^d;
     If[tt < 0, tt = 1 + tt, Null], {jj, k}];
    tt]
```

In[41]:=

N[tran[2, 20, 0.011859756330522941]]
przybliżenie numeryczne

Out[41]= {0.23, 0.110001}

In[30]:=

N[7/352]
przybliżenie nu

Out[30]= 0.0198864

In[31]:=

N[Kodr[2, 20, {0.23, 0.110001}]]
przybliżenie numeryczne

Out[31]= 0.0198864

In[44]:=

N[tranr[2, 20, 7/352]]
przybliżenie numeryczne

Out[44]= {0.23, 0.110001}

In[46]:=
```
N[tranr[2, 10, 7 / 352]]
```
přibliżenie numeryczne

Out[46]= {0.230469, 0.109375}

In[45]:= `tranr[2, 10, 7 / 352]`

Out[45]= $\left\{ \frac{59}{256}, \frac{7}{64} \right\}$

In[38]:=
```
N[tranr[2, 20, 7 / 352]]
```
przybliżenie numeryczne

Out[38]= {0.23, 0.110001}

In[80]:= `Kod[2, 20, {0.22999954223632812`, 0.1100006103515625`}]`

Out[80]= $\frac{3\,259\,984\,929}{274\,877\,906\,944}$

In[81]:=
```
N[%]
```
przybliż

Out[81]= 0.0118598

In[39]:=
```
N[tran[2, 20, 0.011859756330522941`]]
```
przybliżenie numeryczne

Out[39]= {0.23, 0.110001}

%%%

In[33]:= `?? tran`

```
Global`tran
```

```
tran[d_, k_, t_] := Module[{bd, cd, ii, j, jj, tt, KM, km, be, kb}, bd = 1;
  tt := t;
  xx = {1};
  Do[bd = 2^ii - bd + 1;
   AppendTo[xx, 1], {ii, d - 1}];
  cd = bd 2^-d;
  km = {};
  Do[kb = Floor[(tt - cd/2^d) 2^d] + 1;
   tt = 2^d (tt - cd/2^d - (kb - 1) 2^-d);
   If[kb == 2^d, kb = 0, Null];
   AppendTo[km, kb], {j, k}];
  Do[KM = km[[k - j + 1]];
   ww = {};
   Do[If[KM < 2^(d-jj), be = 0, be = 1];
    AppendTo[ww, be];
    KM = KM - be 2^(d-jj);
    If[be == 1, KM = 2^(d-jj) - KM - 1, Null];, {jj, d}];
   Do[xx[[d - jj + 1]] = 1/2 - (1/2 - ww[[jj]]) xx[[d - jj + 1]], {jj, d}];, {j, k}];
  xx]
```

In[24]:=

?? Kod

Global`Kod

```
Kod[d_, k_, x_List] := Module[{xx, bd, cd, ii, jj, KM, km, kb, be, tt}, bd = 1;
  xx = x;
  beta = {};
  KM = {};
  Do[bd = 2^ii - bd + 1, {ii, d - 1}];
  cd = bd 2^-d;
  tt = 1 - cd;
  Do[beta = {};
   Do[xi = xx[[ii]];
     If[xi < 1/2, be = 0, be = 1];
     AppendTo[beta, be];
     xx[[ii]] = (xi - 1/2)/(-1/2 + be), {ii, d}];
   ww = 0;
   kb = 0;
   Do[be = beta[[d - ii + 1]];
     If[be + ww == 1, kb = kb + 2^(d-ii), Null];
     ww = Abs[be - ww], {ii, d}];
   If[kb == 2^d, kb = 0, Null];
   AppendTo[KM, kb], {jj, k}];
  Do[kb = KM[[k - jj + 1]];
   tt = (cd + (kb - 1) + tt)/2^d;
   If[tt < 0, tt = 1 + tt, Null], {jj, k}];
  tt]
```

%%%