SCILAB - tutorial.log

-->OKOLJE -->a=5 a = 5. -->who your variables are... pripravi signalogram preglej a TMPDIR percentlib fraclablib atan1 unix s PWD home soundlib xdesslib utillib tdcslib siglib s2flib roblib optlib metalib elemlib commlib polylib autolib armalib alglib mtlblib WSCI SCI %F %s %nan %inf old newstack %t %f %eps %io %i %T %z newstacksize \$ %i %e %pi 22116 elements out of 1000000. 94 variables out of 1023 -->clear a -1->a=10 a = 10. -->save('okolje') -->clear -->load('okolje') -->who your variables are... pripravi signalogram unix s preglej atan1 SOUND_RECORDER startup ierr scicos_pal MSDOS home PWD TMPDIR percentlib fraclablib soundlib xdesslib utillib tdcslib siglib s2flib roblib optlib metalib elemlib commlib alglib mtlblib WSCI SCI polylib autolib armalib

%F

응i

newstacksize

%T

%e

왕Z

%pi

-->//Iskanje pomoči

%nan

%f

and

%inf

%eps

old

%io

94 variables out of 1023

22116 elements out of 1000000.

-->apropos filter

응S

응t

using

```
-->help size
```

-->//Konstante

```
-->%pi
%pi =
3.1415927
-->%e
%e =
2.7182818
-->%i
%i =
i
-->1+1*%i
ans =
1. + i
-->abs(ans)
```

ans =

1.4142136

-->//Osnovna sintaksa

```
-->a=5
a =
   5.
-->A=10
A =
   10.
-->a+A
ans =
   15.
-->a+A;
-->c=[1 2];b=1.5
b =
   1.5
-->c
c =
! 1. 2.!
```

-->a=... -->5 a =

```
5.
-->//MATRIKE
-->1:10
ans =
! 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.!
-->20:-0.5:-1
ans =
         column 1 to 9
! 20. 19.5 19. 18.5 18. 17.5 17. 16.5 16.!
         column 10 to 18
! 15.5 15. 14.5 14. 13.5 13. 12.5 12. 11.5!
         column 19 to 28
! 11. 10.5 10. 9.5 9. 8.5 8. 7.5 7. 6.5!
         column 29 to 38
! 6. 5.5 5. 4.5 4. 3.5 3. 2.5 2. 1.5!
        column 39 to 43
! 1. .5 0. - .5 - 1. !
-->eye(4,4)
ans =
! 1. 0. 0. 0.!
! 0. 1. 0. 0.!
         0. 1. 0.!
0. 0. 1.!
! 0.
! 0.
-->w=rand(2,4)
w =

      !
      .8782165
      .5608486
      .7263507
      .5442573
      !

      !
      .0683740
      .6623569
      .1985144
      .2320748
      !

-->w(:,:)
ans =

      !
      .8782165
      .5608486
      .7263507
      .5442573 !

      !
      .0683740
      .6623569
      .1985144
      .2320748 !

-->w(:,1:2)
ans =
! .8782165 .5608486 !
```

```
! .0683740 .6623569 !
-->w(:,[1 1 3])
ans =
              .8782165 .7263507 !
.0683740 .1985144 !
   .8782165
    .0683740
-->w($,[1 1 3])
ans =
! .0683740 .0683740 .1985144 !
-->r=rand(1,10)
r =
       column 1 to 5
   .2312237 .2164633 .8833888 .6525135 .3076091 !
       column 6 to 10
   .9329616 .2146008 .312642 .3616361 .2922267!
-->r+2
ans =
       column 1 to 5
! 2.2312237 2.2164633 2.8833888 2.6525135 2.3076091 !
       column 6 to 10
! 2.9329616 2.2146008 2.312642 2.3616361 2.2922267 !
-->r.*rand(1,10)
ans =
       column 1 to 5
   .1309709 .1044754 .2934369 .3872729 .1542765 !
       column 6 to 10
   .4075725 .0577947 .1977694 .1465333 .2684017 !
-->cos ([1 0.5 2])
ans =
   .5403023 .8775826 - .4161468 !
-->cos(w)
ans =
   .6385248 .8468040 .7476031 .8555121 !
.9976634 .7885450 .9803606 .9731913 !
```

-->//Polinomi

```
-->z=poly(0,'z')
z =
   Z
-->p=poly([1 2 3],'z')
p =
              2 3
 - 6 + 11z - 6z + z
-->roots(p)
ans =
! 1. !
! 2. !
! 3. !
-->p1=poly([1 2 3],'z','c')
p1 =
   1 + 2z + 3z
-->roots(p1)
ans =
! - .3333333 + .4714045i !
! - .3333333 - .4714045i !
-->horner (p,[1 2 3])
ans =
! 0. 0. 0.!
-->//Logika
-->1==2
ans =
 F
-->1==1
ans =
 Т
-->1==1 & 2==2
ans =
 Т
-->1==1 & 2==3
ans =
 F
-->1==1 | 2==3
ans =
```

```
Τ
-->a=(1:5);a(a>2)
ans =
! 3. 4. 5.!
-->SEZNAMI (list, tlist)
-->L=list(1, 'w', rand(2,3))
L =
     L(1)
   1.
     L(2)
W
     L(3)
   .0437334 .2639556 .2806498!
.4818509 .4148104 .1280058!
-->L(3)(2,2)
ans =
    .4148104
-->PROGRAMIRANJE - zanke
-->for i=1:3,i,end
i =
   1.
2.
i =
   3.
-->for i=[-30 \ 0 \ 15], i, end
 - 30.
i =
   0.
```

i =

15.

-->for i=L, disp(i), end

```
1.

w
! .0437334 .2639556 .2806498!
! .4818509 .4148104 .1280058!

-->PROGRAMIRANJE - funkcije

// Primer funkcije v datoteki vsota.sci

-->vsota(10,20)
ans =
30.
```

-->GRAFIKA

```
-->plot2d ()
Demo of plot2d
x=0:0.1:2*%pi, plot2d([x;x;x]',[sin(x);sin(2*x);sin(3*x)]',[-1,-2,3],'151','L1@L2@L3',[0,-2,2*%pi,2]);

-->xdel(winsid())
//winsid .. vrne številke vseh oken, xdel jih zbriše
```