

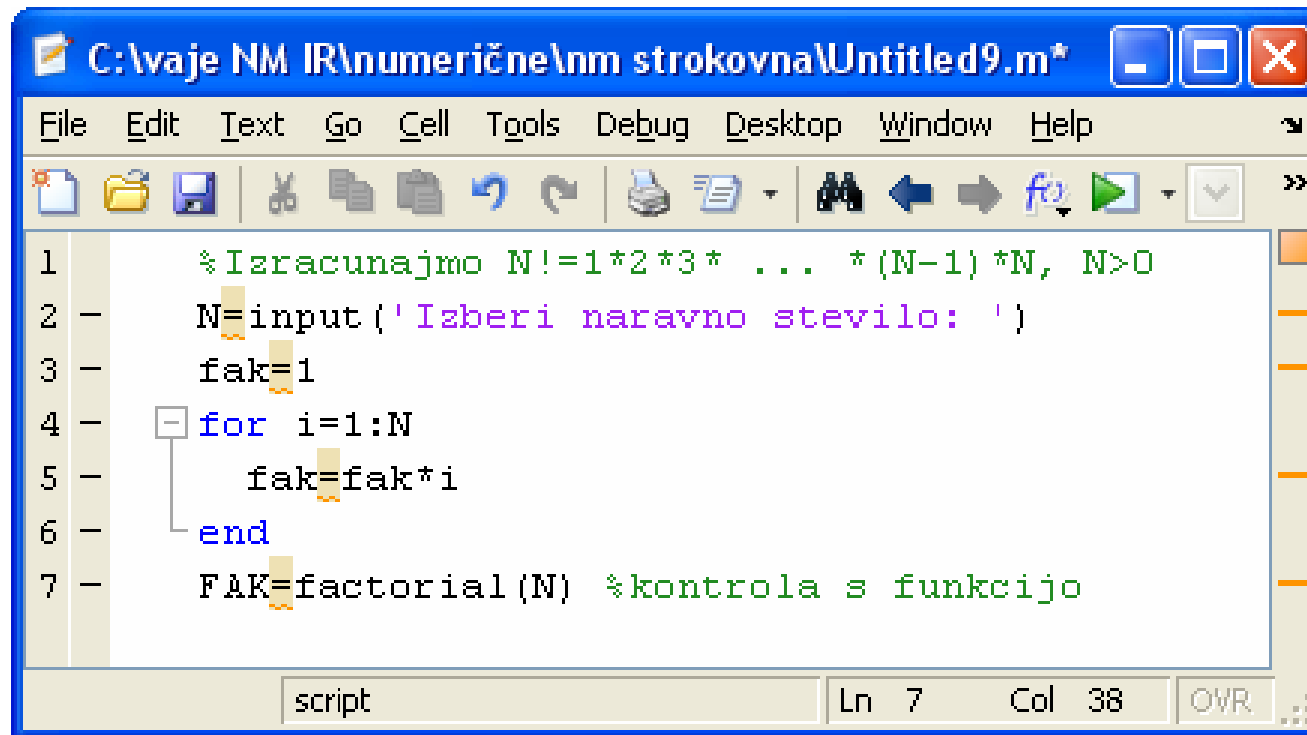
# Krmilni stavki

## 5. VAJA

## 5.1 For zanka

Izračunaj  $n!$  s pomočjo for zanke.

## 5.1 For zanka



The image shows a screenshot of a MATLAB script editor window. The title bar reads "C:\vaje NM IR\numerične\lmm strokovna\Untitled9.m\*". The menu bar includes File, Edit, Text, Go, Cell, Tools, Debug, Desktop, Window, and Help. The toolbar contains icons for file operations and execution. The script content is as follows:

```
1      %Izracunajmo N!=1*2*3* ... *(N-1)*N, N>0
2 -    N=input('Izberi naravno stevilo: ')
3 -    fak=1
4 -    for i=1:N
5 -        fak=fak*i
6 -    end
7 -    FAK=factorial(N) %kontrola s funkcijo
```

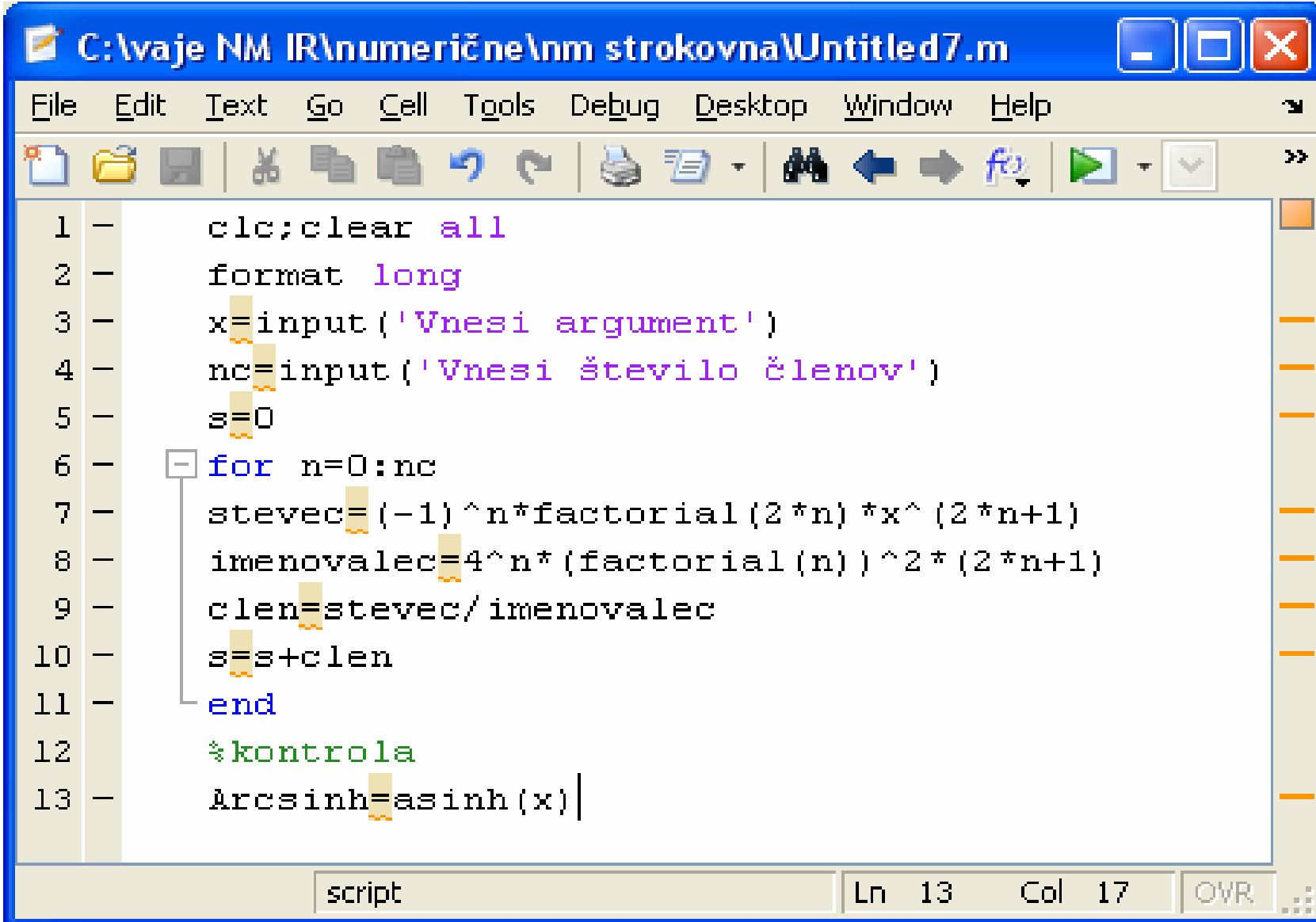
The status bar at the bottom indicates "script", "Ln 7", "Col 38", and "OVR".

## 5.2 For zanka - vrsta

Izračunaj vrsto z uporabo for zanke

$$\operatorname{asinh}(x) = \sum_{n=0}^{\infty} \frac{(-1)^n (2n)!}{4^n (n!)^2 (2n+1)} x^{2n+1}; \quad |x| \leq 1$$

## 5.2 For zanka - vrsta



```
C:\vaje NM IR\numerične\nm strokovna\Untitled7.m
File Edit Text Go Cell Tools Debug Desktop Window Help
[Icons] [Icons] [Icons] [Icons] [Icons] [Icons] [Icons] [Icons] [Icons] [Icons] [Icons] [Icons]
1 -      clc;clear all
2 -      format long
3 -      x=input('Vnesi argument')
4 -      nc=input('Vnesi število členov')
5 -      s=0
6 -      for n=0:nc
7 -          stevec=(-1)^n*factorial(2*n)*x^(2*n+1)
8 -          imenovalec=4^n*(factorial(n))^2*(2*n+1)
9 -          clen=stevec/imenovalec
10 -         s=s+clen
11 -     end
12 -     %kontrola
13 -     Arcsinh=asinh(x)
```

script | Ln 13 | Col 17 | OVR

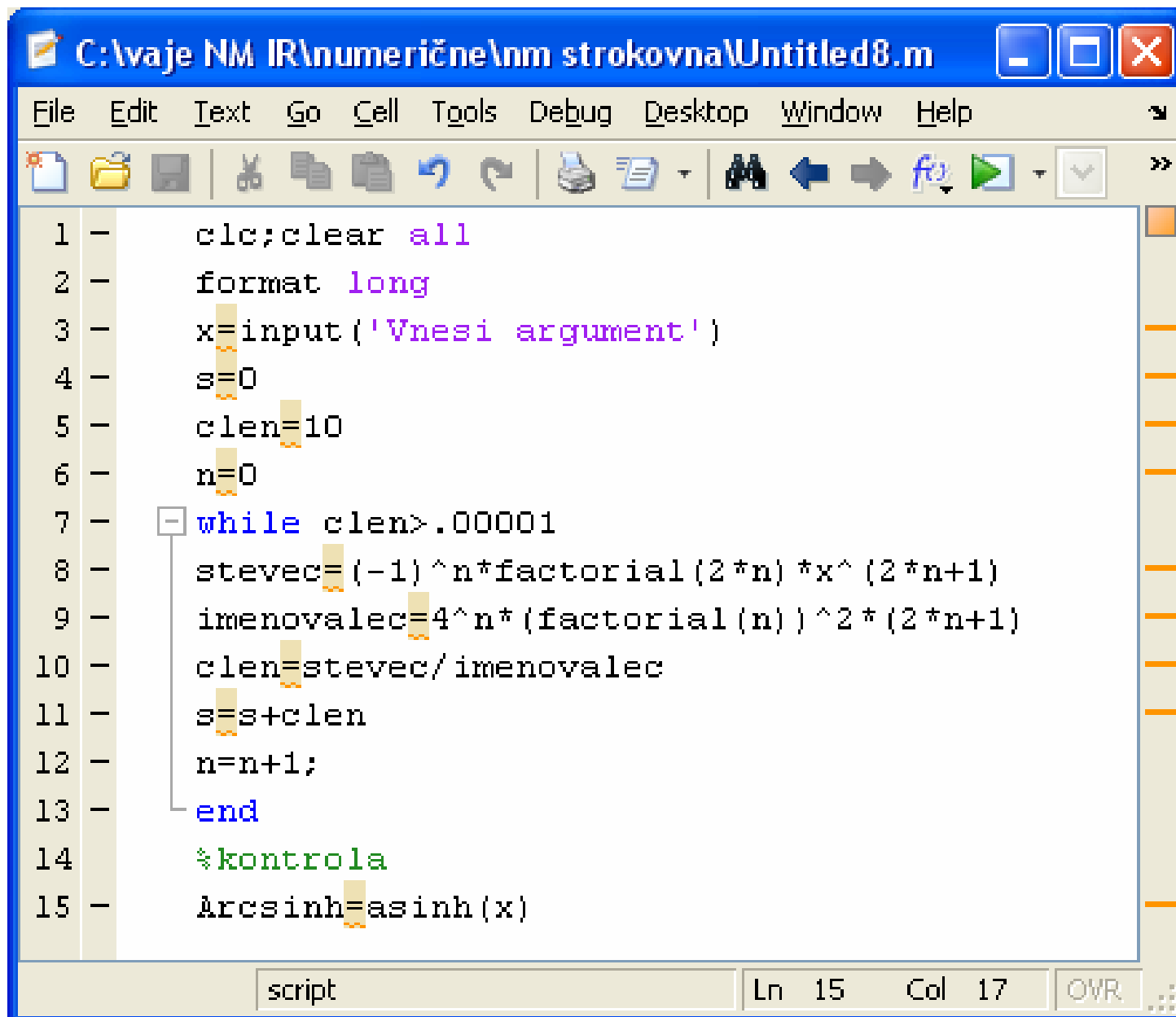
## 5.3 While zanka - vrsta

Izračunaj vrsto z uporabo while zanke

Na pet decimalnih mest točno.

$$\operatorname{asinh}(x) = \sum_{n=0}^{\infty} \frac{(-1)^n (2n)!}{4^n (n!)^2 (2n+1)} x^{2n+1}; \quad |x| \leq 1$$

## 5.3 While zanka - vrsta



```
C:\vaje NM IR\numerične\nm strokovna\Untitled8.m
File Edit Text Go Cell Tools Debug Desktop Window Help
[Icons]
1 -   clc;clear all
2 -   format long
3 -   x=input('Vnesi argument')
4 -   s=0
5 -   clen=10
6 -   n=0
7 -   while clen>.00001
8 -       stevec=(-1)^n*factorial(2*n)*x^(2*n+1)
9 -       imenovalec=4^n*(factorial(n))^2*(2*n+1)
10 -      clen=stevec/imenovalec
11 -      s=s+clen
12 -      n=n+1;
13 -   end
14 -   %kontrola
15 -   Arcsinh=asinh(x)
script Ln 15 Col 17 OVR
```

## 5.4 If stavek – kvadratna enačba

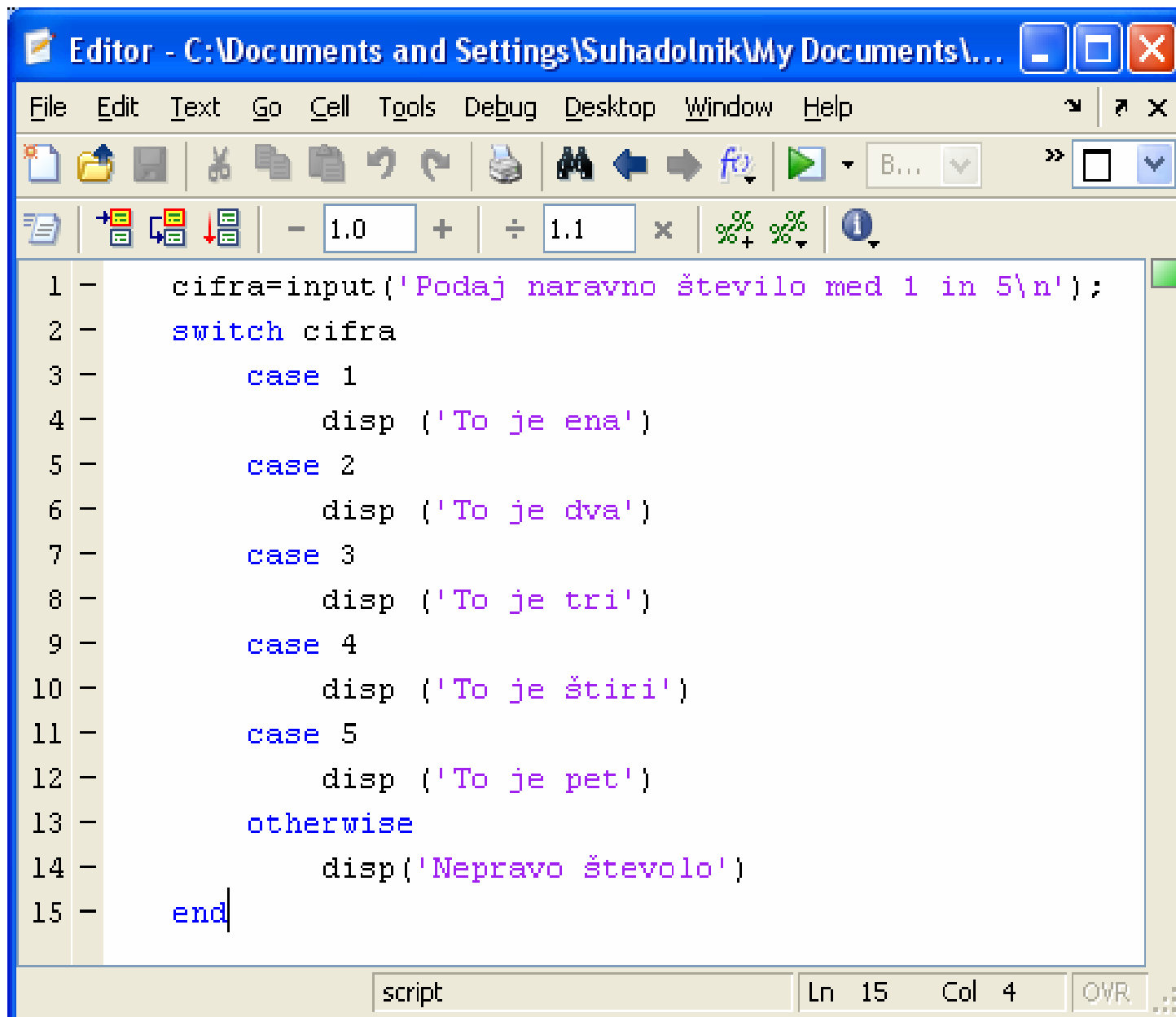
```
Editor - C:\VAJENM~1\NUMERI~1\WMSTRO~1\UNTITL~1.M*
File Edit Text Desktop Window Help
[Icons]
1 a=input('Podaj koeficient a kvadratne enačbe : ');
2 b=input('Podaj koeficient b kvadratne enačbe : ');
3 c=input('Podaj koeficient c kvadratne enačbe : ');
4 disp(' ')
5     if a==0&b==0&c==0
6         disp('Vsak x ustreza enačbi')
7     elseif a==0&b==0&c~=0
8         disp('Protislovje, noben x ne ustreza enačbi')
9     elseif a==0
10        niz=num2str(-c/b,6);
11        disp(['Enačba je linearna, koren= ',niz])
12    else
13        d=b^2-4*a*c;
14        if d~=0
15            x1=(-b+sqrt(d))/2/a;
16            x2=(-b-sqrt(d))/(2*a);
17            disp('Kvadratna enačba ima korena:')
18            disp(x1)
19            disp(x2)
20        else
21            disp(['Kvadratna enačba ima koren: ',num2str(-b/(2*a),6)])
22        end
23    end
script Ln 23 Col 6 OVR
```



## 5.5 Switch – case stavek

Napiši program, ki bo danemu številu med 1 in 5 izpisal ime (ena,dva,tri,štiri,pet). Uporabi 'switch' stavek.

## 5.5 Switch – case stavek



The image shows a screenshot of a MATLAB Editor window. The title bar reads "Editor - C:\Documents and Settings\Suhadolnik\My Documents\...". The menu bar includes File, Edit, Text, Go, Cell, Tools, Debug, Desktop, Window, and Help. The toolbar contains various icons for file operations, editing, and execution. Below the toolbar is a calculator-like interface with buttons for mathematical operations and a display showing "1.0" and "1.1". The main editing area contains the following MATLAB code:

```
1 -   cifra=input('Podaj naravno število med 1 in 5\n');
2 -   switch cifra
3 -       case 1
4 -           disp ('To je ena')
5 -       case 2
6 -           disp ('To je dva')
7 -       case 3
8 -           disp ('To je tri')
9 -       case 4
10 -            disp ('To je štiri')
11 -       case 5
12 -            disp ('To je pet')
13 -       otherwise
14 -            disp('Nepravo število')
15 -   end
```

The status bar at the bottom indicates the current file is "script", the cursor is at line 15, column 4, and the view is "OVR".