

Simbolu virknes

Simbolu virkne C valodā –viendimensiju masīvs ar char tipu, kas beidzas ar nulles baitu (nulles baits – visi biti ir vienādi ar nulli).

Simbolu virkņu ievadizvade: scanf(), gets(), printf(), puts()

Piemēri:

```
char str[11];      // virkne satur N simbolus, tad jāraksta N+1
```

```
char str[15]={ 'B','o', 'r','l', 'a','n', 'd',' ', 'C','+', '+'};
```

```
char str[15]="Borland C++";
```

```
#define str "Borland C++"
```

B	o	r	l	a	n	d		C	+	+	\0
---	---	---	---	---	---	---	--	---	---	---	----

Simbolu virkņu apraksts

```
# include<stdio.h>
```

```
char text [ ] = “Rezultātu tabula”;
```

17

```
main()
```

```
{ static char text1 [ ] = “Ievadiet paroli:”;
```

17

```
char string [20];
```

```
static char letter [ ] = { ‘a’, ‘e’, ‘i’, ‘o’, ‘u’, ‘\0’ };
```

6

```
printf (“Programmas darba sākums”);
```

```
}
```

R	e	z	u	l	t	ā	t	u		t	a	b	u	l	a	\0
---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	---	----

Simbolu virkņu ievadizvade

- Funkcijas **scanf** un **printf** ar formātu **s**

```
char uzvards [15], *p;  
scanf ("%s", uzvards);  
printf ("%s", uzvards);  
printf ("%s", text);
```

```
/* ievadīts Juris Osis */  
/* izvada Juris */  
/* Rezultātu tabula */
```

- Funkcijas **gets** un **puts** (*< rādītājs >*)

```
p = gets (uzvards);  
printf ("%s", uzvards);  
puts (uzvards);  
puts (&uzvards[6]);  
puts ( p+6);  
p = "Tā ir virkne"; puts(p+3);
```

```
/* ievadīts Juris Osis */  
/* izvada Juris Osis */  
/* izvada Juris Osis */  
/* izvada Osis */  
/* izvada Osis */
```

ir virkne

Funkcijas darbam ar simbolu

include <string.h>

```
char text [80];  
char text1 [ ] = "Ievadiet paroli:";  
char string [20], *s;  
int k, n;
```

- int **strlen** (char *s)
 gets (text);
 n = strlen (text);
 k = strlen (text1); **k = 16**
- char* **strcpy** (char*s1,
 char*s2)
 strcpy (string, text1);
 puts (string); **Ievadiet paroli:**

- int **strcmp** (char*s1,
 char*s2)
 n = strcmp ("A", "A"); **0**
 n = strcmp ("A", "B"); **-1**
 n = strcmp ("C", "A"); **2**
- char* **strcat** (char*s1,
 char*s2)
 text = strcat ("grupa", "3");
 text = "grupa3"
- char* **strupr** (char*s)
 strupr (text);
 text = "GRUPA3"

Simbolu izvade

```
#include <stdio.h>
#include <conio.h>
void main()
{
    char ch;
    clrscr();
    ch='c';
    printf ("%c",ch);
    ch='+';
    printf ("%c%c",ch,ch);    // c++
    getch();
}
```

Noteikt aritmētisko simbolu skaitu virknē

```
#include <stdio.h>
#include <string.h>
void main (void)
{
    char s1[80],ch;
    int i,n=0;
    do
    {
        printf("\n Ievadiet virkni: \n\t");
        gets(s1);
        for(i=0;i<strlen(s1);i++)
            if(s1[i]=='*' || s1[i]=='+' || s1[i]=='/' || s1[i]=='-' ) n++;
        printf("\n Rezultāts: \n\t");
        puts(s1);
        printf("\t Aritmētisko simbolu skaits - %d",n);
        n=0;
        printf("\n\n Vēlreiz? jā-1, nē-0\n");
        ch=getche();
    } while(ch=='1');
}
```

Noteikt vārdu skaitu teikumā

```
#include <stdio.h>
#include <conio.h>
#include <string.h>
void main()
{
    int k,l,i,f;
    char str[200];
    clrscr();
    printf("Ievadiet teikumu:\n");
    gets(str);
    l=strlen(str);
    f=i=k=0;
```

```
do {
    if((str[i]!=' ')&&(!f)) f=1;
    if((str[i]==' ')&& (f==1 ))
    { f=0; k++; }
    i++;
} while(str[i]=='.'|| (i<l));
if(str[i-1]!=' ') k++;
printf("\n Vārdu skaits k= %d",k);
getch();
}
```