

# Programiranje 1

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ASCII tabela — dekadne vrednosti

---	32	!	---	33	"	---	34	#	---	35	
\$	---	36	%	---	37	&	---	38	'	---	39
(	---	40	)	---	41	*	---	42	+	---	43
,	---	44	-	---	45	.	---	46	/	---	47
0	---	48	1	---	49	2	---	50	3	---	51
4	---	52	5	---	53	6	---	54	7	---	55
8	---	56	9	---	57	:	---	58	;	---	59
<	---	60	=	---	61	>	---	62	?	---	63
@	---	64	A	---	65	B	---	66	C	---	67
D	---	68	E	---	69	F	---	70	G	---	71
H	---	72	I	---	73	J	---	74	K	---	75
L	---	76	M	---	77	N	---	78	O	---	79
P	---	80	Q	---	81	R	---	82	S	---	83
T	---	84	U	---	85	V	---	86	W	---	87
X	---	88	Y	---	89	Z	---	90	[	---	91
\	---	92	]	---	93	^	---	94	_	---	95
'	---	96	a	---	97	b	---	98	c	---	99
d	---	100	e	---	101	f	---	102	g	---	103
h	---	104	i	---	105	j	---	106	k	---	107
l	---	108	m	---	109	n	---	110	o	---	111
p	---	112	q	---	113	r	---	114	s	---	115
t	---	116	u	---	117	v	---	118	w	---	119
x	---	120	y	---	121	z	---	122	{	---	123
	---	124	}	---	125	~	---	126	---	---	127

ASCII tabela — heksadekadne vrednosti:

---	0x20	!	---	0x21	"	---	0x22	#	---	0x23	
\$	---	0x24	%	---	0x25	&	---	0x26	'	---	0x27
(	---	0x28	)	---	0x29	*	---	0x2a	+	---	0x2b
,	---	0x2c	-	---	0x2d	.	---	0x2e	/	---	0x2f
0	---	0x30	1	---	0x31	2	---	0x32	3	---	0x33
4	---	0x34	5	---	0x35	6	---	0x36	7	---	0x37
8	---	0x38	9	---	0x39	:	---	0x3a	;	---	0x3b
<	---	0x3c	=	---	0x3d	>	---	0x3e	?	---	0x3f
@	---	0x40	A	---	0x41	B	---	0x42	C	---	0x43
D	---	0x44	E	---	0x45	F	---	0x46	G	---	0x47
H	---	0x48	I	---	0x49	J	---	0x4a	K	---	0x4b
L	---	0x4c	M	---	0x4d	N	---	0x4e	O	---	0x4f
P	---	0x50	Q	---	0x51	R	---	0x52	S	---	0x53
T	---	0x54	U	---	0x55	V	---	0x56	W	---	0x57
X	---	0x58	Y	---	0x59	Z	---	0x5a	[	---	0x5b
\	---	0x5c	]	---	0x5d	^	---	0x5e	_	---	0x5f
'	---	0x60	a	---	0x61	b	---	0x62	c	---	0x63
d	---	0x64	e	---	0x65	f	---	0x66	g	---	0x67
h	---	0x68	i	---	0x69	j	---	0x6a	k	---	0x6b
l	---	0x6c	m	---	0x6d	n	---	0x6e	o	---	0x6f
p	---	0x70	q	---	0x71	r	---	0x72	s	---	0x73
t	---	0x74	u	---	0x75	v	---	0x76	w	---	0x77

x --- 0x78	y --- 0x79	z --- 0x7a	{ --- 0x7b
--- 0x7c	} --- 0x7d	~ --- 0x7e	--- 0x7f

ASCII tabela — izdvojene vrednosti za cifre

0 --- 48	0 --- 0x30
1 --- 49	1 --- 0x31
2 --- 50	2 --- 0x32
3 --- 51	3 --- 0x33
4 --- 52	4 --- 0x34
5 --- 53	5 --- 0x35
6 --- 54	6 --- 0x36
7 --- 55	7 --- 0x37
8 --- 56	8 --- 0x38
9 --- 57	9 --- 0x39

ASCII tabela — izdvojene vrednosti za slova

A --- 65	a --- 97		A --- 0x41	a --- 0x61
B --- 66	b --- 98		B --- 0x42	b --- 0x62
C --- 67	c --- 99		C --- 0x43	c --- 0x63
D --- 68	d --- 100		D --- 0x44	d --- 0x64
E --- 69	e --- 101		E --- 0x45	e --- 0x65
F --- 70	f --- 102		F --- 0x46	f --- 0x66
G --- 71	g --- 103		G --- 0x47	g --- 0x67
H --- 72	h --- 104		H --- 0x48	h --- 0x68
I --- 73	i --- 105		I --- 0x49	i --- 0x69
J --- 74	j --- 106		J --- 0x4a	j --- 0x6a
K --- 75	k --- 107		K --- 0x4b	k --- 0x6b
L --- 76	l --- 108		L --- 0x4c	l --- 0x6c
M --- 77	m --- 109		M --- 0x4d	m --- 0x6d
N --- 78	n --- 110		N --- 0x4e	n --- 0x6e
O --- 79	o --- 111		O --- 0x4f	o --- 0x6f
P --- 80	p --- 112		P --- 0x50	p --- 0x70
Q --- 81	q --- 113		Q --- 0x51	q --- 0x71
R --- 82	r --- 114		R --- 0x52	r --- 0x72
S --- 83	s --- 115		S --- 0x53	s --- 0x73
T --- 84	t --- 116		T --- 0x54	t --- 0x74
U --- 85	u --- 117		U --- 0x55	u --- 0x75
V --- 86	v --- 118		V --- 0x56	v --- 0x76
W --- 87	w --- 119		W --- 0x57	w --- 0x77
X --- 88	x --- 120		X --- 0x58	x --- 0x78
Y --- 89	y --- 121		Y --- 0x59	y --- 0x79
Z --- 90	z --- 122		Z --- 0x5a	z --- 0x7a

Napomena: u narednim zadacima podrazumeva se sortiranje od najmanjeg ka najvećem elementu niza.

**Zadatak 1** *Sortirati po ASCII uređenju slova niske "informatika".*

Rešenje: Sortirana slova niske su aafikmnort.

**Zadatak 2** *Sortirati po ASCII uređenju slova niske "INFORMATIKA".*

Rešenje: Sortirana slova niske su AAFIKMNORT.

**Zadatak 3** *Sortirati po ASCII uređenju slova niske "matematika".*

Rešenje: Sortirana slova niske su aaeikmmtt

**Zadatak 4** *Sortirati po ASCII uređenju slova niske "MATEMATIKA".*

Rešenje: Sortirana slova niske su AAAEIKMMTT

**Zadatak 5** *Sortirati po ASCII uređenju slova niske "InFoRmAtIkA".*

Rešenje: Sortirana slova niske su AAFIIRkmmnot.

**Zadatak 6** *Sortirati po ASCII uređenju slova niske "MaTeMaTiKa".*

Rešenje: Sortirana slova niske su KMMTTaaaei.

**Zadatak 7** *Sortirati po ASCII uređenje sledeće niske:*

*ana, Ana, marija, Marija, maja, Maja, jovana, Jovana, jelena, Jelena*

Rešenje: Sortirane niske imaju sledeći redosled:

Ana, Jelena, Jovana, Maja, Marija, ana, jelena, jovana, maja, marija

**Zadatak 8** *Sortirati po ASCII uređenje sledeće niske:*

*ana, ANA, Ana, AnA, aNa*

Rešenje: Sortirane niske imaju sledeći redosled:

ANA, AnA, Ana, aNa, ana.

**Zadatak 9** *Sortirati po ASCII uređenje sledeće niske:*

*marija, Marija, MARIJA, MaRiJa, mArIja, MARija, marIJA*

Rešenje: Sortirane niske imaju sledeći redosled:

MARIJA, MARIja, Marija, mArIja, marIJA, marija.

**Zadatak 10** *Sortirati po ASCII uređenje sledeće niske:*

*011, 381, ana, 064, JANA, PERA, janko, 01ABC*

Rešenje: Sortirane niske imaju sledeći redosled:

011, 01ABC, 064, 381, JANA, PERA, ana, janko.

**Zadatak 11** *Navesti ASCII kodove slova niske "informatika".*

Rešenje: Dekadne vrednosti ASCII kodova slova niske "informatika" su:

105 110 102 111 114 109 97 116 105 107 97

Heksadekadne vrednosti ASCII kodova slova niske "informatika" su:

0x69 0x6e 0x66 0x6f 0x72 0x6d 0x61 0x74 0x69 0x6b 0x61

**Zadatak 12** *Navesti ASCII kodove slova niske "INFORMATIKA".*

Rešenje: Dekadne vrednosti ASCII kodova slova niske "INFORMATIKA" su:

73 78 70 79 82 77 65 84 73 75 65

**Zadatak 13** *Navesti ASCII kodove slova niske "InFoRmAtIkA".*

Rešenje: Dekadne vrednosti ASCII kodova slova niske "InFoRmAtIkA" su:  
73 110 70 111 82 109 65 116 73 107 65

**Zadatak 14** *Navesti ASCII kodove slova niske "MaTeMaTiKa".*

Rešenje: Dekadne vrednosti ASCII kodova slova niske "MaTeMaTiKa" su:  
77 97 84 101 77 97 84 105 75 97

**Zadatak 15** *Koja se reč kodira ASCII kodom  
109 97 116 101 109 97 116 105 107 97*

Rešenje: Kodirana reč je reč "matematika".

**Zadatak 16** *Koja se reč kodira ASCII kodom  
0x4d 0x61 0x74 0x65 0x6d 0x61 0x74 0x69 0x6b 0x61*

Rešenje: Kodirana reč je reč "Matematika".

**Zadatak 17** *Koja se reč kodira ASCII kodom  
77 65 84 69 77 65 84 73 75 65*

Rešenje: Kodirana reč je reč "MATEMATIKA".

**Zadatak 18** *Koja se reč kodira ASCII kodom  
0x4d 0x41 0x54 0x45 0x4d 0x41 0x54 0x49 0x4b 0x41*

Rešenje: Kodirana reč je reč "MATEMATIKA".

**Zadatak 19** *Sa koliko bajtova se kodira ASCII kodom reč "MATEMATIKA"?*

Rešenje: Potrebno je 10 bajtova.

**Zadatak 20** *Sa koliko bajtova se kodira ASCII kodom reč "informatika"?*

Rešenje: Potrebno je 11 bajtova.

**Zadatak 21** *Sa koliko bajtova se kodira ASCII kodom reč "INFORmatika"?*

Rešenje: Potrebno je 11 bajtova.

**Zadatak 22** *Sa koliko bajtova se kodira UTF-8 kodom reč "MATEMATIKA"?*

Rešenje: Potrebno je 10 bajtova.

**Zadatak 23** *Sa koliko bajtova se kodira UTF-8 kodom reč "informatika"?*

Rešenje: Potrebno je 11 bajtova.

**Zadatak 24** *Sa koliko bajtova se kodira UTF-8 kodom reč "INFORmatika"?*

Rešenje: Potrebno je 11 bajtova.

**Zadatak 25** *Sa koliko bajtova se kodira UNICODE kodom reč "MATEMATIKA"?*

Rešenje: Potrebno je 20 bajtova.

**Zadatak 26** *Sa koliko bajtova se kodira UNICODE kodom reč "informatika"?*

Rešenje: Potrebno je 22 bajta.

**Zadatak 27** *Sa koliko bajtova se kodira UNICODE kodom reč "INFORmatika"?*

Rešenje: Potrebno je 22 bajta.

**Zadatak 28** *Sa koliko bajtova se kodira ASCII kodom reč "lišće"?*

Rešenje: Ovu reč nije moguće kodirati ASCII kodom jer sadrži slova š i ć.

**Zadatak 29** *Sa koliko bajtova se kodira UTF-8 kodom reč "lišće"?*

Rešenje: Za slova l, i, e je potreban po jedan bajt, dok je za slova š i ć potrebno po dva bajta. Ukupan broj bajtova je 7.

**Zadatak 30** *Sa koliko bajtova se kodira UNICODE kodom reč "lišće"?*

Rešenje: Potrebno je 10 bajtova.