```
  1   Turbo Assembler    Version 2.0        12/14/08 23:51:23        Page 1
  2   ASM_KST7.ASM
  3
  4        1                    ;
  5        2                    ; Kestutis   Stankevicius, II-06/3
  6        3                    ; Asemblerinis programavimas
  7        4                    ;
  8        5                    ; 7 Auditorijos darbas:
  9        6                    ;
 10        7                    ; Mini kontrolinis darbas:  x = (2ab+c) / (c-b)
 11        8                    ;
 12        9   0000                 stekas SEGMENT STACK
 13       10   0000  0100*(??)            DB 256 DUP (?) ; isskiriame atmintyje 256 baitus
 14       11   0100                 stekas ENDS
 15       12
 16       13     =  000D            CR  EQU 13
 17       14     =  000A            LF  EQU 10
 18       15
 19       16   0000                 duomenys SEGMENT
 20       17                    ; aprasome   kintamuosius
 21       18   0000  19 00 19*(20)          ivsr    DB 25, 0, 25 DUP(' ')
 22       19   001B  50 72 6F 67 72 61 6D+   pra1    DB 'Programos Autorius: ','$'
 23       20         6F 73 20 41 75 74 6F+
 24       21         72 69 75 73 3A 20 24
 25       22   0030  0D 0A              pra2    DB '', CR, LF
 26       23   0032  20 2D 2D 2D 2D 2D 2D+           DB ' ----------', CR, LF
 27       24         2D 2D 2D 2D 2D 0D 0A
 28       25   003F  20 52 65 7A 75 6C 74+           DB ' Rezultatas: x = (2ab+c) / (c-b)', CR, LF, '
              ', CR, LF
 29       26         61 74 61 73 3A 20 78+
 30       27         20 3D 20 28 32 61 62+
 31       28         2B 63 29 20 2F 20 28+
 32       29         63 2D 62 29 0D 0A 20+
 33       30         0D 0A
 34       31   0064  20 20 53 76 65 69 6B+        DB '  Sveikoji dalis: ',  '$'
 35       32         6F 6A 69 20 64 61 6C+
 36       33         69 73 3A 20 24
 37       34   0077  0D 0A 20 0D 0A       pra3    DB '', CR, LF, ' ', CR, LF
 38       35   007C  20 20 20 20 20 20 20+           DB '    Liekana: ',   '$'
 39       36         20 20 4C 69 65 6B 61+
 40       37         6E 61 3A 20 24
 41       38
 42       39   008F  00            vard    DB 0 ; vardiklis
 43       40
 44       41   0090  03*(20) 24        rez_sv  DB 3 DUP (' '), '$'  ; sveika dalis
 45       42   0094  03*(20) 24        rez_li  DB 3 DUP (' '), '$'  ; liekana
 46       43
 47       44   0098  04            dalyba  DB 4
 48       45   0099  02            a       DB 2
 49       46   009A  03            b       DB 3
 50       47   009B  05            c       DB 5
 51       48
 52       49   009C  02            du      DB 2
 53       50   009D  0A            desimt  DB 10
 54       51
 55       52   009E                 duomenys ENDS
 56       53
 57       54   0000                 programa SEGMENT
 58       55                  ASSUME CS:programa, DS:duomenys, SS:stekas
 59       56
 60       57   0000              START:
 61       58                  ; pradzia
 62       59   0000  B8 0000s          MOV AX, duomenys
 63       60   0003  8E D8             MOV DS, AX
 64       61
 65       62                  ; isvalyti   ekrana
 66       63   0005  B8 0002           MOV AX, 0002h
 67       64   0008  CD 10             INT 10h
 68       65
 69       66                  ; pranesimas1
 70       67   000A  B4 09             MOV AH, 09h
 71       68   000C  BA 001Br          LEA DX, pra1
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72    69   000F  CD 21              INT 21H
73    70
74    71                   ; ivedimas
75    72   0011  B4 0A         MOV AH, 0Ah
76    73   0013  BA 0000r        LEA DX, ivsr
77    74   0016  CD 21          INT 21h
78    75
79    76                   ; $ gale ivesto teksto
80    77   0018  BF 0002r        LEA DI, ivsr+2
81    78   001B  8A 1E 0001r     MOV BL, ivsr+1
82    79   001F  B7 00          MOV BH, 0
83    80   0021  03 FB          ADD DI,BX ; adresas kur siusime $ zenkla
84    81   0023  B7 24          MOV BH, '$'
85    82   0025  88 3D          MOV [DI], BH ; spausdinimo  pabaiga
86    83
87    84                   ; skaiciuojam kur spausdinti
88    85   0027  B0 50          MOV AL, 80
89    86   0029  B4 00          MOV AH, 0
90    87   002B  2A C3          SUB AL, BL   ; atimtis
91    88   002D  F6 36 0098r      DIV dalyba
92    89   0031  8A D0          MOV DL, AL    ; randam kur pradeti spausdinti
93    90   0033  B6 02          MOV DH, 2
94    91   0035  B4 02          MOV AH, 02    ; 2 eilute
95    92   0037  B7 00          MOV BH, 00    ; puslapio numeris
96    93   0039  CD 10          INT 10h  ;   i paskaiciuota vieta pastatom zymekli spausdinimui
97    94
98    95                   ; skaiciavimai
99    96                   ; skaiciuojam vardikli vard=c-b
100   97   003B  A0 009Br        MOV AL, c
101   98   003E  B4 00          MOV AH, 0
102   99   0040  2A 06 009Ar      SUB AL, b
103  100   0044  A2 008Fr        MOV vard, AL
104  101                   ; skaiciuojam skaitikli 2ab+c / vard=c-b
105  102   0047  A0 009Cr        MOV AL, du
106  103   004A  B4 00          MOV AH, 0
107  104   004C  F6 26 0099r      MUL a
108  105   0050  F6 26 009Ar      MUL b
109  106   0054  02 06 009Br      ADD AL, c
110  107   0058  F6 36 008Fr      DIV vard
111  108                   ; kuriam rezultata
112  109                   ; issaugojam liekana
113  110   005C  88 26 0094r      MOV rez_li, AH
114  111   0060  B4 00          MOV AH, 0
115  112                   ; sveika dalis
116  113   0062  F6 36 009Dr      DIV desimt
117  114   0066  88 26 0092r      MOV rez_sv+2,AH
118  115   006A  80 06 0092r 30    ADD rez_sv+2,30h
119  116   006F  B4 00          MOV AH, 0
120  117
121  118   0071  F6 36 009Dr      DIV desimt
122  119   0075  88 26 0091r      MOV rez_sv+1,AH
123  120   0079  80 06 0091r 30    ADD rez_sv+1,30h
124  121   007E  B4 00          MOV AH, 0
125  122
126  123   0080  F6 36 009Dr      DIV desimt
127  124   0084  88 26 0090r      MOV rez_sv,AH
128  125   0088  80 06 0090r 30    ADD rez_sv,30h
129  126
130  127                   ; liekana
131  128   008D  A0 0094r        MOV AL, rez_li
132  129   0090  B4 00          MOV AH, 0
133  130
134  131   0092  F6 36 009Dr      DIV desimt
135  132   0096  88 26 0096r      MOV rez_li+2,AH
136  133   009A  80 06 0096r 30    ADD rez_li+2,30h
137  134   009F  B4 00          MOV AH, 0
138  135
139  136   00A1  F6 36 009Dr      DIV desimt
140  137   00A5  88 26 0095r      MOV rez_li+1,AH
141  138   00A9  80 06 0095r 30    ADD rez_li+1,30h
142  139   00AE  B4 00          MOV AH, 0
143  140
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144     141  00B0  F6 36 009Dr      DIV desimt
145     142  00B4  88 26 0094r      MOV rez_li,AH
146     143  00B8  80 06 0094r 30     ADD rez_li,30h
147     144
148     145                 ; spausdinimas
149     146  00BD  B4 09          MOV AH, 09h
150     147  00BF  BA 0002r         LEA DX, ivsr+2
151     148  00C2  CD 21         INT 21h
152     149
153     150  00C4  B4 09          MOV AH, 09h
154     151  00C6  BA 0030r         LEA DX, pra2
155     152  00C9  CD 21         INT 21h
156     153
157     154  00CB  B4 09          MOV AH, 09h
158     155  00CD  BA 0090r         LEA DX, rez_sv
159     156  00D0  CD 21         INT 21h
160     157
161     158  00D2  B4 09          MOV AH, 09h
162     159  00D4  BA 0077r         LEA DX, pra3
163     160  00D7  CD 21         INT 21h
164     161
165     162  00D9  B4 09          MOV AH, 09h
166     163  00DB  BA 0094r         LEA DX, rez_li
167     164  00DE  CD 21         INT 21h
168     165
169     166                 ; paspausti bet koki klavisa
170     167  00E0  B4 07            MOV AH, 07h
171     168  00E2  CD 21            INT 21h
172     169
173     170                 ; iseiti is programos
174     171  00E4  B4 4C            MOV AH, 4ch
175     172  00E6  CD 21            INT 21h
176     173
177     174  00E8                 programa ENDS
178     175
179     176                 END START
180   Symbol Table
181
182   Symbol Name          Type     Value
183
184   ??DATE               Text    "12/14/08"
185   ??FILENAME           Text    "ASM_KST7"
186   ??TIME               Text    "23:51:23"
187   ??VERSION            Number 0200
188   @CPU          Text    0101H
189   @CURSEG              Text    PROGRAMA
190   @FILENAME            Text    ASM_KST7
191   @WORDSIZE            Text    2
192   A           Byte    DUOMENYS:0099
193   B           Byte    DUOMENYS:009A
194   C           Byte    DUOMENYS:009B
195   CR          Number 000D
196   DALYBA            Byte    DUOMENYS:0098
197   DESIMT            Byte    DUOMENYS:009D
198   DU          Byte    DUOMENYS:009C
199   IVSR            Byte    DUOMENYS:0000
200   LF          Number 000A
201   PRA1            Byte    DUOMENYS:001B
202   PRA2            Byte    DUOMENYS:0030
203   PRA3            Byte    DUOMENYS:0077
204   REZ_LI            Byte    DUOMENYS:0094
205   REZ_SV            Byte    DUOMENYS:0090
206   START           Near    PROGRAMA:0000
207   VARD            Byte    DUOMENYS:008F
208
209   Groups & Segments      Bit Size Align  Combine Class
210
211   DUOMENYS             16  009E Para    none
212   PROGRAMA             16  00E8 Para    none
213   STEKAS               16  0100 Para    Stack
```