

1	PROGRAM wallcalendar;	(PROGRAM BY H M KEEGAN)
2		(WRITTEN IN HISOFT PASCAL)
3	CONST bc='#';	(FOR THE AMSTRAD CPC464)
4		
5	TYPE	
6	months=(JAN,FEB,MAR,APR,MAY,JUN,JUL,AUG,SEP,OCT,NOV,DEC);	
7	monthlengths=28..31;	
8	years=1985..9999;	
9	week=1..7;	
10	switch=(off,on);	
11	montharray=ARRAY [1..18] OF char;	
12	caltype=(academic,normal);	

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13
14 VAR
15     year          :years;
16     firstday      :week;
17     monthstrings:montharray;
18     printswitch:switch;
19     key            :char;
20     calendar       :caltype;
21 (-----)
22 FUNCTION isleap(year:years):boolean;
23
24 BEGIN
25     isleap:=(year MOD 4=0) AND (year MOD 100<>0) OR (year MOD 400=0);
26 END;
27 (-----)
28 FUNCTION numdays(month:months):week;
29
30 BEGIN
31     CASE month OF
32         JAN,MAR,MAY,JUL,AUG,OCT,DEC:numdays:=31;
33         APR,JUN,SEP,NOV:numdays:=30;
34         FEB:IF isleap(year+1-ord(calendar)) THEN numdays:=29 ELSE numdays:=28
35     END;
36 END;
37 (-----)
38 FUNCTION day1:week;    (determine day OF week 1st day falls on)
39
40 VAR     yr:years;
41         day:integer;
42
43 BEGIN
44     IF calendar=normal THEN day:=6 ELSE day:=5;
45     FOR yr:=1985 TO year DO
46         IF isleap(yr-ord(calendar)) THEN day:=day+2 ELSE day:=day+1;
47     day1:=(day MOD 7)+1;
48 END;
49 (-----)
50 PROCEDURE spaces(num:integer);
51
52 BEGIN
53     WHILE num>0 DO
54         BEGIN
55             write(' '); num:=num-1;
56         END;
57 END;
58 (-----)
59 PROCEDURE underline(uline:switch);
60
61 BEGIN
62     IF printswitch=on THEN
63         IF uline=on THEN write(chr(27),chr(45),chr(1)) (turn on underlining)
64             ELSE write(chr(27),chr(45),chr(0)) (turn off underlining)
65     END;
66 (-----)
67 PROCEDURE printer;
68
69 BEGIN
70     write(chr(16)); (toggles CTRL-P)
71 END;
72 (-----)
73 PROCEDURE prtmonths(first,last:months);
74
75 VAR     month:months;
76         next:week;
77
78     PROCEDURE printmonth(daysinmonth:monthlengths);
79
80     VAR     day:integer;
81
82         PROCEDURE pm(sp:integer; monthstring:montharray);
83
84         VAR     k:integer;
85
86         BEGIN (pm)
87             spaces(sp); underline(on);
88             k:=1;
89             REPEAT
90                 write(monthstring[k]);
91                 k:=k+1;
92             UNTIL monthstring[k]='.';
93             underline(off); spaces(sp);
94         END;
95
96     BEGIN (printmonth)
97         write(bc); spaces(10);
98         CASE month OF
99             JAN:pm(2,'J a n u a r y.....');
100            FEB:pm(1,'F e b r u a r y...');
101            MAR:pm(4,'M a r c h.....');
102            APR:pm(4,'A p r i l.....');
103            MAY:pm(6,'M a y.....');
104            JUN:pm(5,'J u n e.....');
105            JUL:pm(5,'J u l y.....');
106            AUG:pm(3,'A u g u s t.....');
107            SEP:pm(0,'S e p t e m b e r. ');
108            OCT:pm(2,'O c t o b e r.....');
109            NOV:pm(1,'N o v e m b e r...');
110            DEC:pm(1,'D e c e m b e r...');
111        END;
112
113        spaces(49); writeln(bc); writeln; write(bc);
114        write(' Mon Tue Wed Thu Fri Sat Sun');
115        spaces(41); writeln(bc); writeln; write(bc);
116        spaces((firstday-1)*5);
117

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118 FOR day:=1 TO daysinmonth DO
119 BEGIN
120 write(day:5);
121 IF ((day MOD 7)+firstday) MOD 7=1 THEN
122 BEGIN
123 spaces(41); writeln(bc);writeln; write(bc);
124 END;
125 END;
126 IF (firstday+daysinmonth) MOD 7=0 THEN next:=7
127 ELSE next:=(firstday+daysinmonth) MOD 7;
128 spaces(76-(next-1)*5); writeln(bc);
129 writeln; write(bc); spaces(76); writeln(bc); writeln;
130 END;
131
132 BEGIN (prtmonths)
133 FOR month:=first TO last DO
134 BEGIN
135 printmonth(numdays(month));
136 firstday:=next;
137 END;
138 END;
139 (-----)
140 PROCEDURE titles;
141
142 VAR I,J:integer;
143
144 BEGIN
145 FOR I:=1 TO 4 DO
146 BEGIN
147 write(bc);
148 FOR J:=1 TO 9 DO
149 BEGIN
150 write(year:4); write(year+1-ord(calendar):4);
151 END;
152 writeln(year:4,bc);
153 END;
154 END;
155 (-----)
156 BEGIN (main PROGRAM)
157 write(chr(4),chr(2)); (mode 2)
158 write(chr(28),chr(0),chr(23),chr(23)); (paper)
159 write(chr(28),chr(1),chr(0),chr(0)); (pen)
160 write(chr(29),chr(23),chr(23)); (border)
161
162 writeln(' C A L E N D A R');
163 writeln('-----'); writeln;
164
165 writeln; write('Enter year: '); read(year);
166
167 calendar:=normal;
168 writeln; write('Normal or Academic Calendar (N/A): ');
169 readln; read(key);
170 IF (key='A') OR (key='a') THEN calendar:=academic;
171
172 printswitch:=off;
173 writeln; write('Printer on? (Y/N): '); readln; read(key);
174 IF (key='Y') OR (key='y') THEN printswitch:=on;
175
176 IF printswitch=on THEN printer;
177 writeln; titles;
178 write(bc); spaces(76); writeln(bc); writeln;
179
180 firstday:=day1;
181 IF calendar=normal THEN prtmonths(JAN,DEC)
182 ELSE
183 BEGIN
184 prtmonths(SEP,DEC);
185 prtmonths(JAN,AUG);
186 END;
187
188 write(bc); spaces(76); writeln(bc); titles;
189 IF printswitch=on THEN printer;
190 END;
191 (-----)

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