```
1 #include <stdio.h>
 2 #include <stdlib.h>
 3 #include <string.h>
4 #include <conio.h>
 6 #define max 2000
7 #define merah
                  "\x1B[31m"
8 #define biru "\x1B[36m"
9 #define kuning "\x1B[33m"
10
   // Menghubungkan ke Database
11
12 FILE *fold;
13 FILE *fcek;
14 FILE *fnew;
15
16 void tulis_kalender();
17 void tulis_agenda();
18 void hapus_agenda();
19
20 int tahun, int_tahun, cek_tahun = 0, int_bulan, hari, int_tggl, hari_bulan,
   txt_agenda = 0 ,agenda = 0, pekan = 0, hari_mulai, get_hari, cek_sama = 0;
21 int tggl_bulan[12] = {31, 28, 31, 30, 31, 30, 31, 30, 31, 30, 31};
22 char *bulan[12]=
   {"januari", "februari", "maret", "april", "mei", "juni", "juli", "agustus", "september", "okto
   ber", "november", "desember"};
23 char get_bulan[max], get_agenda[max];
24 char set_tahun[max][10], set_bulan[max][10], set_agenda[max][10], set_hari[max][10],
   char_hari[max], char_tahun[max];
char del_bulan[max], del_agenda[max], comp_bulan[max], comp_agenda[max];
26 int del_tahun, del_tggl;
27
28 int mulai_dari(int tahun){
29
       int tggl;
       tggl = (((tahun - 1) * 365) + ((tahun - 1) / 4) - ((tahun - 1) / 100) + ((tahun))
30
   / 400) + 1) % 7;
31
       return tggl;
   }
32
   void clear_data(){
33
34
       fflush(stdin);
35
       memset(set_tahun, 0, max);
36
       memset(set_bulan, 0, max);
37
       memset(set_hari, 0, max);
38
       memset(set_agenda, 0, max);
       memset(del_bulan, 0, max);
39
40
       memset(del_agenda, 0, max);
41
       memset(char_tahun, 0, max);
42
       memset(char_hari, 0, max);
43
44
45
   void tulis_agenda(){
       fold = fopen("database.txt","a+");
46
47
48
       if(fold == NULL){
49
           printf("\n\t| database maintenance");
50
           return;
51
       }
52
53
       data:
54
       printf("\n");
                             : ",biru);
       printf("%sdi bulan
```

```
56
        scanf("%s", get_bulan);
        printf("%sdi tanggal : ",biru);
 57
        scanf("%d", &get_hari);
 58
        printf("%sagenda apa : ",biru);
 59
 60
        scanf("%s", get_agenda);
 61
        if((tahun%4==0 && tahun%100!=0) || tahun%400==0){
 62
 63
             tggl_bulan[1]=29;
 64
        }
 65
 66
        int b, s, h;
 67
        b = 0;
        while(b < 12){
 68
 69
             hari_mulai = tggl_bulan[b];
 70
             h = 1;
 71
             while(h <= hari_mulai){</pre>
                 if(get_hari == h && strcmp(bulan[b], get_bulan) == 0){
 72
 73
                     s = 0;
 74
                     break;
 75
                 }else if(get hari != h && strcmp(bulan[b], get bulan) != 0){
 76
                     S++;
 77
                 }
 78
                 h++;
 79
 80
             if(s == 0){
 81
                 break;
 82
 83
             b++;
 84
 85
        if(s > 0){
             printf("\n\n\t| bulan atau tggl tidak tepat :I\n\n");
 86
 87
             s = 0;
 88
             goto data;
 89
        }
 90
 91
        fprintf(fold, "%d %s %d %s\n", tahun, get_bulan, get_hari, get_agenda);
 92
 93
        fclose(fold);
 94
        agenda = 0;
 95
    }
    void tulis_kalender(){
 96
 97
        int warna = 0, s = 1, u = 0;
 98
        // s = scan keberapa
 99
        // u = urutan keberapa
100
101
        clear_data();
102
        if((tahun%4==0 && tahun%100!=0) || tahun%400==0){
103
104
             tggl_bulan[1]=29;
105
        }
106
107
        hari_mulai = mulai_dari(tahun);
108
109
        // masalah sort selesai
        if(cek_tahun != 0){
110
             fold = fopen("database.txt","r");
111
112
113
             while(s > 0){
                 s = fscanf(fold, "%s %s %s %s", set_tahun[u], set_bulan[u], set_hari[u],
114
    set_agenda[u]);
```

```
115
                 u++;
116
             }
117
118
             s = u;
119
120
             int_bulan = 0;
121
             while (int_bulan<12){
                  hari_bulan = tggl_bulan[int_bulan];
122
123
                  printf("\n\n\t%s| %s\n",biru, bulan[int_bulan]);
124
125
                  printf("\n %sminggu senin selasa rabu kamis
                                                                          jum'at sabtu\n",
    biru);
126
127
                  pekan=0;
128
                  while(pekan<hari mulai){</pre>
129
                      printf("
                                       ");
130
                      pekan++;
131
                  }
132
                 hari=1;
133
134
                 while(hari<=hari_bulan){</pre>
                      sprintf(char_hari, "%d", hari);
sprintf(char_tahun, "%d", tahun);
135
136
137
138
                      u = 0;
139
                      while(u < s - 1){
140
                           if(strcmp(char_hari, set_hari[u]) == 0 &&
    strcmp(bulan[int_bulan], set_bulan[u]) == 0 && strcmp(char_tahun,set_tahun[u]) == 0){
141
                               cek_sama = 1;
142
                               break;
143
                          }
                          else{
144
145
                               cek_sama = 0;
146
                               u++;
147
                           }
148
                      }
149
150
                      if(cek sama == 0){
151
                           if(warna == 0){
                               printf(" %s%6s",biru, char_hari);
152
153
                           }if(warna != 0){
154
                               printf(" %s%6s", merah, char_hari);
155
                               warna = 0;
156
                          }
157
158
                      else if(cek_sama == 1){
                          printf(" %s%6s",kuning, char_hari);
159
160
                          warna = 0;
161
                      }
162
163
                      if(++pekan>6){
164
                          printf("\n");
165
                          warna++;
166
                          pekan=0;
167
168
                      hari_mulai = pekan;
169
                      hari++;
170
171
                  }
                  u = 0;
172
```

```
173
               while (u < s - 1){
174
                    sprintf(char_tahun, "%d", tahun);
175
                    if(strcmp(bulan[int bulan], set bulan[u]) == 0 &&
    strcmp(char_tahun, set_tahun[u]) == 0){
                        if(txt_agenda == 0){
176
                            printf("\n\n");
printf("%sAgenda:",kuning);
177
178
                            printf("\n%s%s
179
                                           %s", kuning, set_hari[u], set_agenda[u]);
180
                            txt_agenda++;
                        }
181
182
                        else if(txt_agenda != 0){
183
                            184
                        }
185
                    }
186
                    u++;
187
188
                printf("\n");
189
                txt_agenda = 0;
190
                int_bulan++;
191
            fclose(fold);
192
193
        else if (cek_tahun == 0){
194
195
            int_bulan=0;
196
            while (int bulan<12){
197
                hari_bulan = tggl_bulan[int_bulan];
198
                199
                printf("\n %sminggu senin selasa rabu kamis
200
                                                                  jum'at sabtu\n",
    biru);
201
202
                pekan = 0;
203
                while(pekan<hari_mulai){</pre>
204
                    printf("
205
                   pekan++;
206
207
               hari=1;
208
                while(hari<=hari_bulan){</pre>
209
                    if(warna == 0){
210
                    printf(" %s%6d",biru, hari);
211
212
                    if(warna != 0){
                    printf(" %s%6d", merah, hari);
213
214
                   warna = 0;
215
216
                    if(++pekan>6){
217
                        printf("\n");
218
                       warna++;
219
                        pekan=0;
220
221
                   hari_mulai = pekan;
222
                   hari++;
223
224
                int_bulan++;
225
226
            printf("\n");
227
228
        cek_tahun = 0;
229
    }
230
    void menu_delete(){
```

```
231
        clear_data();
232
        printf("\n");
        printf("%sdi tahun
                              : ", biru);
233
        scanf("%d", &del_tahun);
234
        printf("%sdi bulan
235
                               : ", biru);
        scanf("%s", del_bulan);
236
237
        printf("%sdi tanggal : ", biru);
238
        scanf("%d", &del_tggl);
        printf("%sagenda apa : ", biru);
239
240
        scanf("%s", del_agenda);
241
242
    void hapus_agenda(){
243
        int s, u, c;
244
        fold = fopen("database.txt","r");
245
246
        fcek = fopen("database.txt","r");
        fnew = fopen("database.tmp","w");
247
248
249
        if(fold == NULL || fnew == NULL){
250
             printf("\n\t| database maintenance");
251
             return;
252
        }
253
254
        menu_delete();
255
256
        s = 1 , u = 0 , c = 0;
257
258
        while(s > 0){
259
             s = fscanf(fold, "%s %s %s %s", set_tahun[u], set_bulan[u], set_hari[u],
    set_agenda[u]);
260
             u++;
261
262
        fclose(fold);
263
264
        s = u;
265
266
        u = 0;
267
        while(u < s - 1){
             sprintf(char_hari, "%d", del_tggl);
268
269
             sprintf(char_tahun, "%d", del_tahun);
270
             if(strcmp(set_tahun[u], char_tahun) == 0 && strcmp(set_bulan[u], del_bulan)
271
    == 0 && strcmp(set_hari[u], char_hari) == 0 && strcmp(set_agenda[u], del_agenda) ==
    0){
272
                 c = 0;
273
                 break;
274
             }else{
275
                 C++;
276
             }
            u++;
277
278
        }
279
280
        if(c > 0){
281
             printf("\n\t| tahun, bulannya,\n\t| tanggal, agenda,\n\t| tidak ditemukan :
    {\n");
282
             menu_delete();
283
        }
284
285
        while(fscanf(fcek, "%d %s %d %s", &int_tahun, comp_bulan, &int_tggl, comp_agenda)
    != EOF){
```

```
286
             if(int_tahun == del_tahun && strcmp(comp_bulan, del_bulan) == 0 && int_tggl
    == del_tggl && strcmp(comp_agenda, del_agenda) == 0){
287
                 continue;
             }else{
288
289
                 fprintf(fnew, "%d %s %d %s\n", int_tahun, comp_bulan, int_tggl,
    comp_agenda);
290
             }
291
        }
292
293
        fclose(fnew);
294
        fclose(fcek);
295
        remove("database.txt");
296
        rename("database.tmp","database.txt");
297
    }
298
299
    int main(int argc, char* argv[]){
300
        int menu;
301
        ulang:
302
303
        clear_data();
        // system("cls");
304
305
        system("color B");
306
307
        fold = fopen("database.txt","r");
308
        printf("\n");
309
310
        printf("masukan tahun: ");
311
        scanf("%d", &tahun);
312
313
        if(fold == NULL){
314
             printf("\n\t| agendan kosong");
315
        }else{
             while(fscanf(fold, "%d %s %s %s", &int_tahun, set_bulan, set_hari,
316
    set_agenda) != EOF){
317
                 if (tahun == int_tahun){
318
                     cek_tahun ++;
319
                     break;
320
                 }
             }
321
322
        }
323
324
        fclose(fold);
325
326
        tulis_kalender();
327
328
329
        menu:
        printf("\n\n\n%smenu :v ",biru);
330
        printf("\n%s1. tulis agenda",biru);
331
        printf("\n%s2. hapus agenda",biru);
332
        printf("\n%s3. keluar\n",biru);
333
334
        printf("\n%snomor | ",biru);
        scanf("%d", &menu);
335
336
        if(menu == 1){
337
             printf("\n");
338
339
             tulis_agenda();
340
             goto ulang;
341
        if(menu == 2){
             printf("\n");
342
```

```
hapus_agenda();
343
344
             goto ulang;
         }if(menu == 3){
   printf("\t| Anda Keluar \n");
345
346
             exit(0);
347
         }
348
349
350
         return 0;
351 }
352
```