#include <graphics.h>

#include <conio.h>

#include <stdio.h>

#include<time.h>

#include<stdio.h>

#pragma comment(lib,"Winmm.lib")

void background();

void background1();

void background2();

void background3();

void start();

void movemusic();

int ini();

void end();

void control(int []);

int score=0;//记录分数

int q=0;//判断游戏是否结束

void main()

{

int cnt=0;

char num1[100],num2[100];

int s[16]={0};

int x,y;//记录初始2个方块的位置

initgraph(640,480);

srand( (unsigned)time(NULL));//

mciSendString("open 1.mp3 alias mymusic", NULL, 0, NULL);

mciSendString("play mymusic", NULL, 0, NULL);//播放音乐

background();

background1(); //开始界面

start();

x=ini();

y=ini();

while (x==y)

x=ini();

s[x]=s[y]=2;

setfont(60,0,"华文行楷");

settextcolor(RGB(244,164,96));

sprintf(num1,"%d",s[x]);

sprintf(num2,"%d",s[y]);

outtextxy(80+(x%4)\*100,80+(x/4)\*100,num1);

outtextxy(80+(y%4)\*100,80+(y/4)\*100,num2);//初始化2个随机方块为2

do

{

cnt=0;

control(s);

for (int i=0;i<16;i++)

{

if (s[i]!=0)

cnt++;

}

if (cnt==16)

{q++;

end();

}

}while(q==0);//移动操作

}

void movemusic()

{

mciSendString("stop music", NULL, 0, NULL);

mciSendString("close music", NULL, 0, NULL);

mciSendString("open 3.wav alias music", NULL, 0, NULL);

mciSendString("play music", NULL, 0, NULL);//播放音乐

}

void start()

{

MOUSEMSG m;

while (true)

{

float H=255;

float S=99;

float L=71;

m=GetMouseMsg();

if (m.x>240 && m.x<400 && m.y>300&&m.y<340)

{

settextcolor(RGB(H, S, L));

setfont(40,0,"华文行楷");

outtextxy(240,300, "开始游戏");

if (m.uMsg==WM\_LBUTTONDOWN)

{

mciSendString("stop mymusic", NULL, 0, NULL);

mciSendString("close mymusic", NULL, 0, NULL);//关闭背景音乐

background2();

break;}

}

else

{

settextcolor(WHITE);

setfont(40,0,"华文行楷");

outtextxy(240,300, "开始游戏");

}

if (m.x>240 && m.x<400 && m.y>350&&m.y<390)

{

settextcolor(RGB(H, S, L));

setfont(40,0,"华文行楷");

outtextxy(240,350, "操作说明");

if (m.uMsg==WM\_LBUTTONDOWN)

{background3();

Sleep(3000);

mciSendString("stop mymusic", NULL, 0, NULL);

mciSendString("close mymusic", NULL, 0, NULL);//关闭背景音乐

background2();

break;

}

}

else

{

settextcolor(WHITE);

setfont(40,0,"华文行楷");

outtextxy(240,350, "操作说明");

}

if (m.x>240 && m.x<400 && m.y>400&&m.y<440)

{

settextcolor(RGB(H, S, L));

setfont(40,0,"华文行楷");

outtextxy(240,400, "退出游戏");

if (m.uMsg==WM\_LBUTTONDOWN)

{closegraph();

break;}

}

else

{

settextcolor(WHITE);

setfont(40,0,"华文行楷");

outtextxy(240,400, "退出游戏");

}

}

}

void background()

{

loadimage(NULL, "C:\\yxdown\\2048\\8.jpg",640,480);

Sleep(4000);

}

void background1()

{

loadimage(NULL, "C:\\yxdown\\2048\\1.jpg",640,480);

setbkmode(TRANSPARENT);

setfont(40,0,"华文行楷");

outtextxy(380,440, "Made by MY");

}

void background2()

{

loadimage(NULL, "C:\\yxdown\\2048\\3.jpg",640,480);

setlinecolor(RGB(169,169,169));

setlinestyle(PS\_SOLID | PS\_JOIN\_BEVEL, 10);

for(int i=0;i<=4;i++)

{line(50+100\*i,50,50+100\*i,450);}

for(int j=0;j<=4;j++)

{line(50,50+100\*j,450,50+100\*j);}

settextcolor(RGB(244,164,96));

setfont(40,0,"华文行楷");

outtextxy(450,150, "q:结束游戏");

outtextxy(450,100,"分数:");

}

void background3()

{

cleardevice();

setbkcolor(RGB(192,192,192));

cleardevice();

settextcolor(RGB(255,160,122));

outtextxy(240,100, "w:上移");

outtextxy(240,150, "s:下移");

outtextxy(240,200, "a:左移");

outtextxy(240,250, "d:右移");

outtextxy(240,300, "q:退出游戏");

outtextxy(240,350, "2s后自动进入游戏");

}

int ini()

{

int a;

srand( (unsigned)time(NULL));

a=rand()%16;

return a;

}//初始化位置

void control(int \*s)

{

int p[16]={0};

int y=0;

int i,j,x;

char out3[16][100];

int t;

char c;

int num[4][4];

for (i=0;i<4;++i)

{

for (j=0;j<4;j++)

{

num[i][j]=s[4\*i+j];

}

}

setfont(50,0,"华文行楷");

char sco[100];

sprintf(sco,"%d",score);

outtextxy(550,100,sco);

score+=10;

c=getch();

movemusic();

switch(c)

{

case 'a':

for (i=0;i<4;i++)

{

for(x=0;x<3;x++)

{

for(j=2;j>=0;j--)

{

if (num[i][j]==0)

{

t=num[i][j+1];

num[i][j+1]=num[i][j];

num[i][j]=t;

}

}

}

}

for(i=0;i<4;i++)

{

for(j=0;j<3;j++)

if(num[i][j]==num[i][j+1])

{

if(num[i][j]!=0)

score+=12;

num[i][j]=num[i][j+1]+num[i][j];

num[i][j+1]=0;

}

}

for (i=0;i<4;i++)

{

for(x=0;x<3;x++)

{

for(j=2;j>=0;j--)

{

if (num[i][j]==0)

{

t=num[i][j+1];

num[i][j+1]=num[i][j];

num[i][j]=t;

}

}

}

}

for (i=0;i<4;++i)

{

for (j=0;j<4;j++)

{

s[4\*i+j]=num[i][j];

}

}

background2();

for(i=0;i<16;i++)

{

if(s[i]!=0)

{

setfont(50,0,"华文行楷");

sprintf(out3[i],"%d",s[i]);

outtextxy(80+(i%4)\*100,80+(i/4)\*100,out3[i]);

}

}

for(i=0;i<16;i++)

{

if (s[i]==0)

p[y++]=i;

}

x=rand()%y;

j=p[x];

s[j]=2;

setfont(50,0,"华文行楷");

sprintf(out3[j],"%d",s[j]);

outtextxy(80+(j%4)\*100,80+(j/4)\*100,out3[j]);

break;

case 'd':

for (i=0;i<4;i++)

{

for(x=0;x<3;x++)

{

for(j=1;j<=3;j++)

{

if (num[i][j]==0)

{

t=num[i][j-1];

num[i][j-1]=num[i][j];

num[i][j]=t;

}

}

}

}

for(i=0;i<4;i++)

{

for(j=0;j<3;j++)

if(num[i][j]==num[i][j+1])

{

num[i][j]=num[i][j+1]+num[i][j];

num[i][j+1]=0;

if(num[i][j]!=0)

score+=12;

}

}

for (i=0;i<4;i++)

{

for(x=0;x<3;x++)

{

for(j=1;j<=3;j++)

{

if (num[i][j]==0)

{

t=num[i][j-1];

num[i][j-1]=num[i][j];

num[i][j]=t;

}

}

}

}

for (i=0;i<4;++i)

{

for (j=0;j<4;j++)

{

s[4\*i+j]=num[i][j];

}

}

background2();

for(i=0;i<16;i++)

{

if(s[i]!=0)

{

setfont(50,0,"华文行楷");

sprintf(out3[i],"%d",s[i]);

outtextxy(80+(i%4)\*100,80+(i/4)\*100,out3[i]);

}

}

for(i=0;i<16;i++)

{

if (s[i]==0)

p[y++]=i;

}

x=rand()%y;

j=p[x];

s[j]=2;

setfont(50,0,"华文行楷");

sprintf(out3[j],"%d",s[j]);

outtextxy(80+(j%4)\*100,80+(j/4)\*100,out3[j]);

break;

case 'w':

for (j=0;j<=3;j++)

{

for(x=0;x<3;x++)

{

for(i=0;i<3;i++)

{

if (num[i][j]==0)

{

t=num[i+1][j];

num[i+1][j]=num[i][j];

num[i][j]=t;

}

}

}

}

for(j=0;j<4;j++)

{

for(i=0;i<4;i++)

if(num[i][j]==num[i+1][j])

{

num[i][j]=num[i+1][j]+num[i][j];

num[i+1][j]=0;

if(num[i][j]!=0)

score+=12;

}

}

for (j=0;j<4;j++)

{

for(x=0;x<3;x++)

{

for(i=0;i<3;i++)

{

if (num[i][j]==0)

{

t=num[i+1][j];

num[i+1][j]=num[i][j];

num[i][j]=t;

}

}

}

}

for (i=0;i<4;++i)

{

for (j=0;j<4;j++)

{

s[4\*i+j]=num[i][j];

}

}

background2();

for(i=0;i<16;i++)

{

if(s[i]!=0)

{

setfont(50,0,"华文行楷");

sprintf(out3[i],"%d",s[i]);

outtextxy(80+(i%4)\*100,80+(i/4)\*100,out3[i]);

}

}

for(i=0;i<16;i++)

{

if (s[i]==0)

p[y++]=i;

}

x=rand()%y;

j=p[x];

s[j]=2;

setfont(50,0,"华文行楷");

sprintf(out3[j],"%d",s[j]);

outtextxy(80+(j%4)\*100,80+(j/4)\*100,out3[j]);

break;

case 's':

for (j=0;j<4;j++)

{

for(x=0;x<3;x++)

{

for(i=1;i<=3;i++)

{

if (num[i][j]==0)

{

t=num[i-1][j];

num[i-1][j]=num[i][j];

num[i][j]=t;

}

}

}

}

for(j=0;j<4;j++)

{

for(i=0;i<4;i++)

if(num[i][j]==num[i+1][j])

{

num[i][j]=num[i+1][j]+num[i][j];

num[i+1][j]=0;

if(num[i][j]!=0)

score+=12;

}

}

for (j=0;j<4;j++)

{

for(x=0;x<3;x++)

{

for(i=1;i<=3;i++)

{

if (num[i][j]==0)

{

t=num[i-1][j];

num[i-1][j]=num[i][j];

num[i][j]=t;

}

}

}

}

for (i=0;i<4;++i)

{

for (j=0;j<4;j++)

{

s[4\*i+j]=num[i][j];

}

}

background2();

for(i=0;i<16;i++)

{

if(s[i]!=0)

{

setfont(50,0,"华文行楷");

sprintf(out3[i],"%d",s[i]);

outtextxy(80+(i%4)\*100,80+(i/4)\*100,out3[i]);

}

}

for(i=0;i<16;i++)

{

if (s[i]==0)

p[y++]=i;

}

x=rand()%y;

j=p[x];

s[j]=2;

setfont(50,0,"华文行楷");

sprintf(out3[j],"%d",s[j]);

outtextxy(80+(j%4)\*100,80+(j/4)\*100,out3[j]);

break;

case 'q':

q++;

end();

break;

default:

break;

}

}

void end()

{

cleardevice();

setbkcolor(RGB(255,160,122));

cleardevice();

settextcolor(RGB(192,192,192));

outtextxy(180,160,"Your score:");

char sco[100];

sprintf(sco,"%d",score-10);

outtextxy(400,160,sco);

outtextxy(360,300,"Thanks");

Sleep(4000);

}//结束界面