/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\* CLOCK \*/

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#include<stdio.h>

#include<conio.h>

#include<graphics.h>

#include<math.h>

#include<stdlib.h>

#include<dos.h>

#define PI 3.141593

#define R 170

#define sc setcolor

char \*month[]={"Jan","Feb","Mar","Apr","May","Jun","Jul","Aug","Sep","Oct","Nov","Dec"};

void Box(int x,int y,int x1,int y1,int width,int color,int color1)

{int i;

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

{sc(color);line(x+i,y+i,x+i,y1-i);line(x+i,y+i,x1-i,y+i);

sc(color1);line(x+i,y1-i,x1-i,y1-i);line(x1-i,y+i,x1-i,y1-i);}

}

void main(){int gd=DETECT,gm,midx,midy,i;

initgraph(&gd,&gm,"C:\\TC\\BGI");

midx=getmaxx()/2;

midy=getmaxy()/2;

setbkcolor(0); sc(15);

setfillstyle(1,10); fillellipse( midx , midy , 207 , 207 );

setfillstyle(1,7); fillellipse( midx , midy , 200 , 200 );

for(i=0;i<12;i++) pieslice( midx , midy , i\*30 , (i+1)\*30 , 200 );

sc(7); fillellipse( midx , midy , 185 , 185 );

settextstyle( TRIPLEX\_FONT , HORIZ\_DIR , 1 );

char ss[90];int P,Q;

for(i=1;i<=12;i++){ sc(1); sprintf(ss,"%d",i);

if(i==5) { P=10 ; Q=-10; }

else if(i==6){ P=20 ; Q=-5; }

else if(i==4) Q=-10;

else if(i==7){ P=7 ; Q=5; }

else { P=0 ; Q=0; }//show number

outtextxy( midx+185\*sin(PI\*30\*i/180)+Q , midy-P-185\*cos(PI\*30\*i/180) , ss);}

while(!kbhit()){

settextstyle( TRIPLEX\_FONT , HORIZ\_DIR , 1 );

sc( 9 );outtextxy( midx-52 , midy-132 , "IECH SETHA" );

struct dosdate\_t date; \_dos\_getdate(&date);

sprintf( ss , "%d" , date.year );

sc(15); outtextxy( midx-20 , 5 , ss );//show year

settextstyle( 0 , 0 , 1 ); sc( 4 );

sprintf( ss , "%d %s" ,date.day,month[date.month-1] );

outtextxy( 297 , midy-150 , ss );//show date

sc(12); outtextxy( midx-15 , midy+150 , "RUPP" );

Box( midx-26 , midy-156 , midx+26 , midy-140 , 1 , 8 , 15 );

//box of date

struct dostime\_t t; \_dos\_gettime(&t);

if(t.hour>12)t.hour=t.hour-12;

sprintf( ss,"%02d:%02d:%02d",t.hour,t.minute,t.second );

setfillstyle(1,7);bar( midx+160 , midy-9 , midx+177 , midy+9 );

if(t.minute==0&&t.hour==0&&t.second==0) bar(midx-26,midy-156,midx+126,midy-140);

if(t.second==0) bar( midx+135 , midy-9 , midx+150 , midy+9 );

if(t.second==0&&t.minute==0)bar( midx+112 , midy-9 , midx+128 , midy+9 );

sc(4); outtextxy( midx+112 , midy-2 , ss );

Box( midx+108 , midy-10 , midx+178 , midy+10 , 1 , 8 , 15 );

//box of time

sc(7);line( midx ,midy , midx+sin(PI\*6\*(t.second-1)/180)\*R , midy-cos(PI\*6\*(t.second-1)/180)\*R );

if(t.second%10==0)for(i=-3;i<=3;i++)

line( midx+i , midy+i , midx+sin(PI\*(6\*t.minute+(t.second-10)/10)/180)\*(R-20) , midy-cos(PI\*(6\*t.minute+(t.second-10)/10)/180)\*(R-20) );

if(t.second==0)for(i=-4;i<5;i++)

line( midx+i , midy+i , midx+sin(PI\*(30\*t.hour+(t.minute-2)/2)/180)\*(R-70) , midy-cos(PI\*(30\*t.hour+(t.minute-2)/2)/180)\*(R-70) );

//line of second

sc(0);line( midx , midy , midx+sin(PI\*6\*t.second/180)\*R , midy-cos(PI\*6\*t.second/180)\*R );

for(i=-3;i<=3;i++)//line of minute

line( midx+i , midy+i , midx+sin(PI\*(6\*t.minute+t.second/10)/180)\*(R-20) , midy-cos(PI\*(6\*t.minute+t.second/10)/180)\*(R-20) );

for(i=-4;i<5;i++)//line of hour

line( midx+i , midy+i , midx+sin(PI\*(30\*t.hour+t.minute/2)/180)\*(R-70) , midy-cos(PI\*(30\*t.hour+t.minute/2)/180)\*(R-70));

if(t.minute==0&&t.second<=15)sound(600\*(t.second+5)/5);

else nosound();

setfillstyle(1,4);fillellipse( midx , midy , 5 , 5 );

delay(100);}//end while

closegraph();

}