```
// Ch4_DoorDlg.cpp : implementation file
//完整的VS源代码工程见附件。在公邮hust_mrsu_os_mooc@163.com中也有！


UINT DrawRectgle(LPVOID lpParam);

UINT DrawRectgle(LPVOID lpParam);


UINT DrawCircle(LPVOID lpParam)
{
   CCh4_DoorDlg* pDlg = (CCh4_DoorDlg*)lpParam;
   // TODO: Add your control notification handler code here
   CDC * pDC;
 pDC= pDlg->GetDC();


   CPoint CirclePoint(180,180);//原点


   COLORREF crColour=RGB(0,0,255);


   int R0 = 150; //半径


   const double degree_half = 0.008726; //每半度 2×3.1415 / 720


   int i = 0 ;
 for (i=0; i<720; i++)
 {
  pDC->SetPixelV(
        CirclePoint.x + R0 * sin(degree_half * i),
        CirclePoint.y + R0 * cos(degree_half * i),
     crColour);
  Sleep(10);


   }


   return 0;
}
```

```
UINT DrawRectgle(LPVOID lpParam)
{
    CCh4_DoorDlg* pDlg = (CCh4_DoorDlg*)lpParam;
    // TODO: Add your control notification handler code here
    CDC * pDC;
 pDC= pDlg->GetDC();

    CPoint CirclePoint(180,180);//原点

    COLORREF crColour = RGB(255,0,0);

    int R0 = 150; //半径

    const double degree_half = 0.008726; //每半度 2×3.1415 / 720

 //换个位置画方
    CirclePoint.x = CirclePoint.x +  2 * R0 + 10 ;

 // 右上： 左上： 左下：右下：
 // 右上：(CirclePoint.x + R0, CirclePoint.y - R0)
 // 左上：(CirclePoint.x - R0, CirclePoint.y - R0)
 // 左下：(CirclePoint.x - R0, CirclePoint.y + R0)
 // 右下：(CirclePoint.x + R0, CirclePoint.y + R0)

 float factor = 1.65 ; //屏幕宽度长度不协调，需要调节！！！
 float Delta = 2 * R0 / 180 * factor ;

 int ii = 0 ;

 //上边
 for (ii=0; ii<180; ii++)
 {
     pDC->SetPixelV(
         CirclePoint.x + R0  - Delta * ii,
         CirclePoint.y - R0,
      crColour);
```

```
  Sleep(10);
}

//左边
for (ii=0; ii<180; ii++)
{
    pDC->SetPixelV(
        CirclePoint.x - R0,
        CirclePoint.y - R0  + Delta * ii ,
     crColour);
  Sleep(10);
}

//下边
for (ii=0; ii<180; ii++)
{
    pDC->SetPixelV(
        CirclePoint.x - R0 + Delta * ii,
        CirclePoint.y + R0 ,
     crColour);
  Sleep(10);
}

//右边
for (ii=0; ii<180; ii++)
{
    pDC->SetPixelV(
        CirclePoint.x + R0 ,
        CirclePoint.y + R0 - Delta * ii,
     crColour);
  Sleep(10);
}

return 0;

}
```

```
// 画圆和画方（线程方式）
//同时调用两个函数分别画圆和画方
void CCh4_DoorDlg::OnBUTTONThread()
{
 // TODO: Add your control notification handler code here
 // 画圆的函数：DrawCircle
 pThread_Circle = AfxBeginThread(DrawCircle, this);

   // 画方的函数
 pThread_Rectgle = AfxBeginThread(DrawRectgle, this);
}
```