```
private string strToolName;
private void btnTouch Click(object sender, EventArgs e)
    strToolName = "Touch";
private void axMapControl1 OnMouseDown(object sender, IMapControlEvents2 OnMouseDownEvent e)
    if (strToolName == "" || e.button != 1 || axMapControl1.LayerCount <= 0) return;
    //获取当前地图并清空
    IActiveView pActiveView = axMapControl1.ActiveView;
    IMap pMap = axMapControl1.Map;
    pMap.ClearSelection();
    //设置目标图层的(这里假设是第一个图层)
    IFeatureLayer pFeatureLayer = (IFeatureLayer)axMapControl1.get Layer(0);
    //点选
    IPoint pPoint = pActiveView.ScreenDisplay.DisplayTransformation.ToMapPoint(e.x, e.y);
    ISpatialFilter pSpatialFilter = new SpatialFilterClass();
    pSpatialFilter.Geometry = pPoint;
    pSpatialFilter.SpatialRel = esriSpatialRelEnum.esriSpatialRelIntersects;
    IFeatureCursor pFeatureCursor = pFeatureLayer.Search(pSpatialFilter, false);
    IFeature pFeature = pFeatureCursor.NextFeature();
    if (pFeature != null)
         IGeometry pGeometry = pFeature.Shape;
         IRelationalOperator pRelOperator = pGeometry as IRelationalOperator;
        //设置 Touch 要素的颜色
         IFeatureSelection pFeatureSelection = pFeatureLayer as IFeatureSelection;
         pFeatureSelection.SelectionColor = new RgbColorClass() { Red = 255 };
        //返回图层全部要素
         IFeatureCursor compareCursor = pFeatureLayer.Search(null, false);
         IFeature compareFeature = compareCursor.NextFeature();
         while (compareFeature != null)
             IGeometry compareGeometry = compareFeature.Shape;
             switch (strToolName)
```

```
case "Touch":

{

//如果要素与点选要素边界相交,就加入地图选择集

if (pRelOperator.Touches(compareGeometry))

{

pMap.SelectFeature(pFeatureLayer, compareFeature);
}

break;
}

compareFeature = compareCursor.NextFeature();
}

//刷新地图
pActiveView.Refresh();
}
```