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#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<math.h>
void lines(int x1,int y1,int x2,int y2);
void rotate(int x1, int y1,int x2,int y2);
void main()
{
    int gd=DETECT,gm=DETECT;
    int x1,x2,y1,y2;
    initgraph(&gd,&gm,"c:\\tc\\bgi");
    detectgraph(&gd,&gm);
    printf("ENTER THE POINTS FOR THE LINE:");
    scanf("%d %d %d %d",&x1,&y1,&x2,&y2);
    lines(x1,y1,x2,y2);
    getch();
    cleardevice();
    rotate(x1,y1,x2,y2);
    setcolor(2);
    lines(x1,y1,x2,y2);
    getch();
}
void lines(int x1,int y1, int x2,int y2)
{
    line(x1,y1,x2,y2);
}
void rotate(int x1,int y1, int x2,int y2)
{
    int m1,n1,m2,n2;
    float angle;
    printf("Enter the Angle of Rotation:");
    scanf("%f",&angle);
    cleardevice();
    angle=(angle*3.14)/180;
    m1=(x1*cos(angle)-y1*sin(angle));
    n1=(x1*sin(angle)+y1*cos(angle));
    m2=(x2*cos(angle)-y2*sin(angle));
    n2=(x2*sin(angle)+y2*cos(angle));
    printf("ROTATE");
    line(m1,n1,m2,n2);
}

```