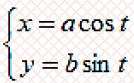
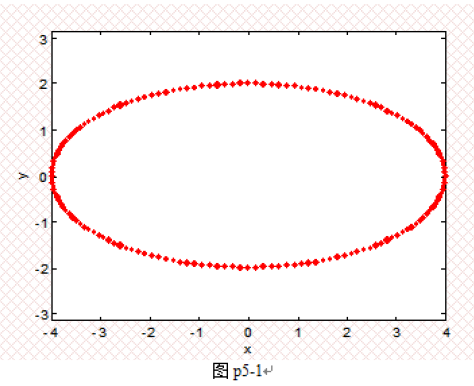
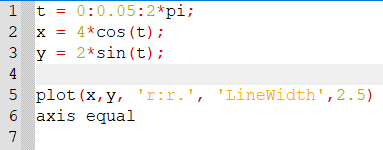
# 数值计算实验报告——章节二

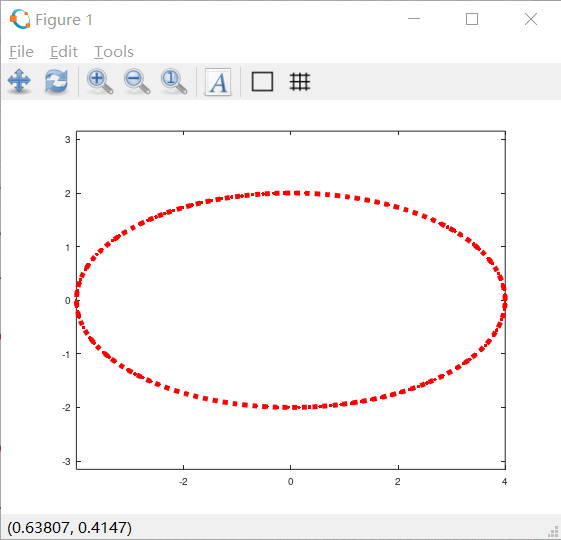
## 姓名： 胡诚皓 学号： 20201060330 专业： 计算机科学与技术

## 一、二维图形绘制

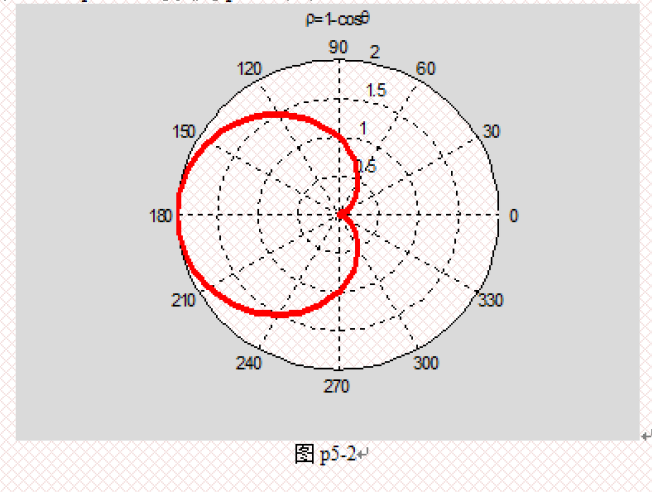
1. 已知椭圆的长、短轴a=4，b=2，用“小红点线”画如图p5-1所示的椭圆

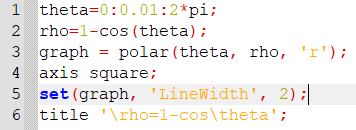


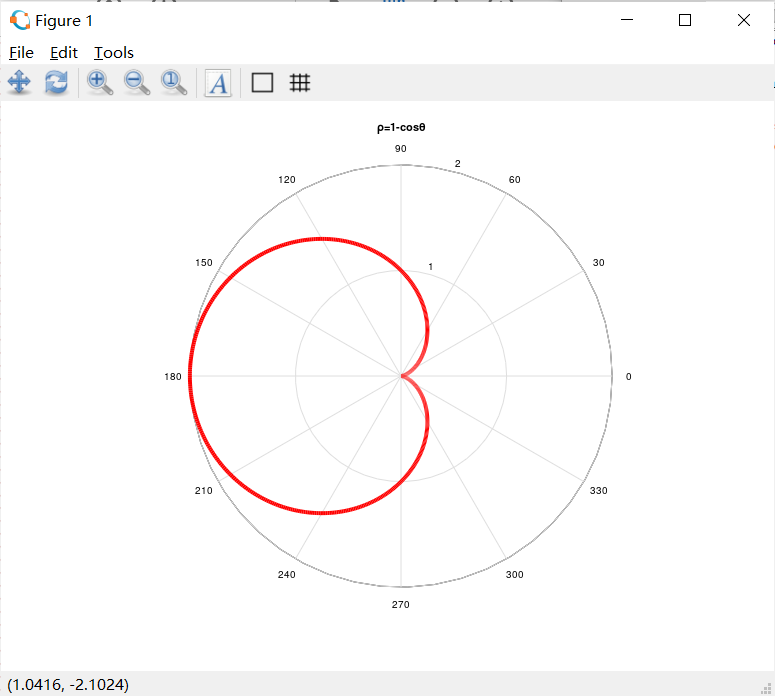




1. 根据表达式绘制如图p5-2的心脏线

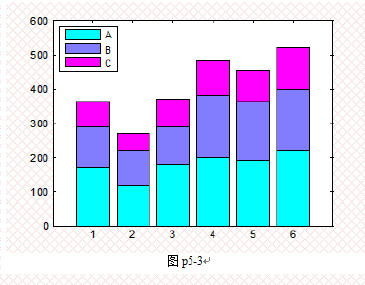


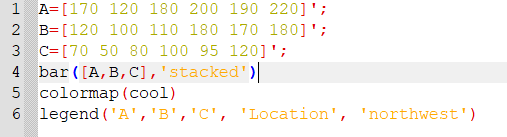


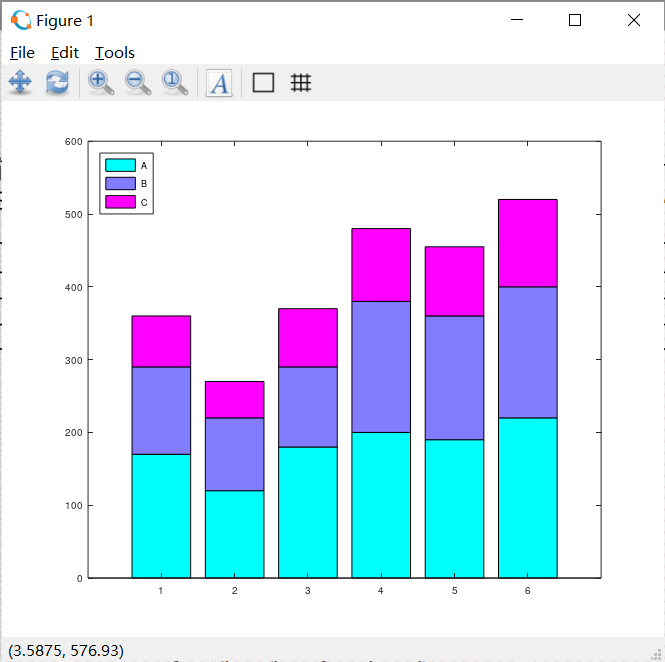


1. A、B、C三个城市上半年每个月的国民生产总值表p5.1。试画出如图p5-3所示的三城市上半年每月生产总值的累计直方图

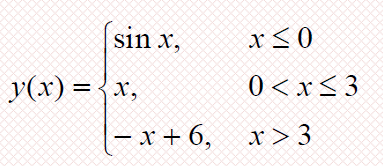


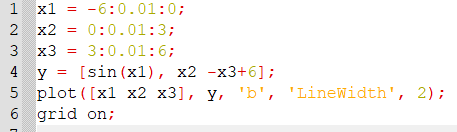


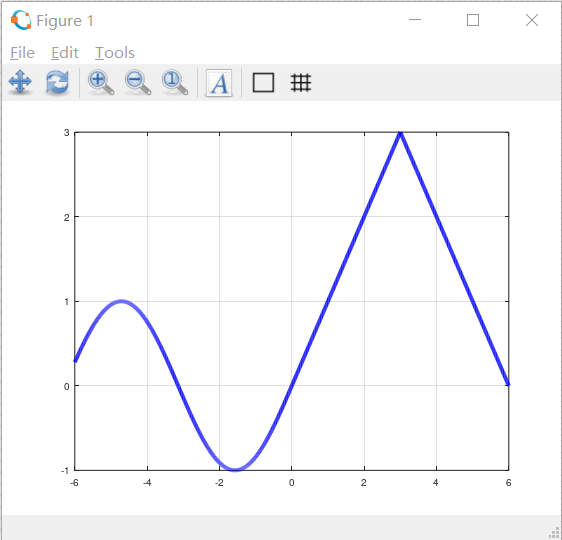




1. 编写程序，绘制下列函数在区间[-6, 6]中的图形



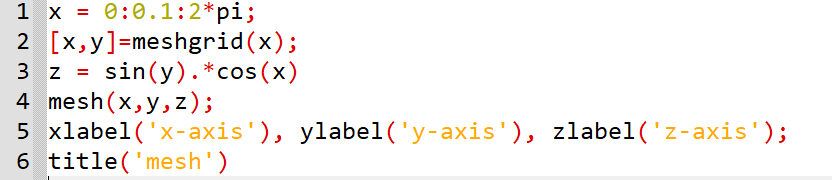


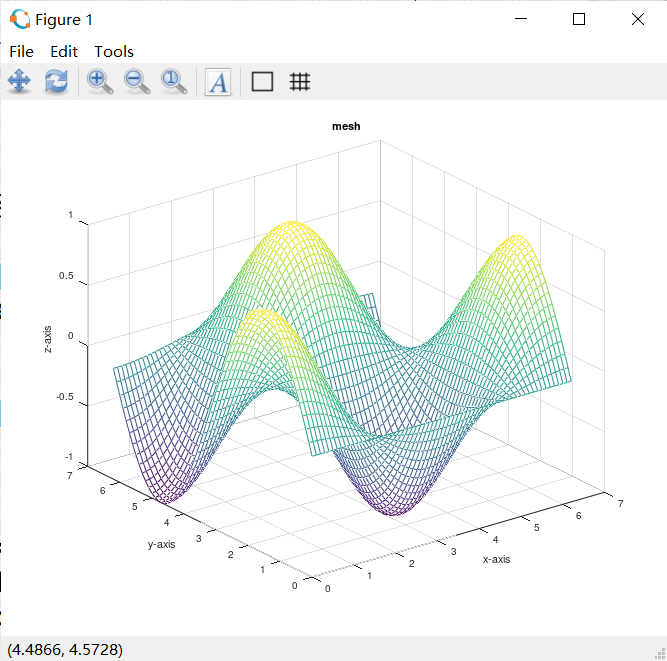


## 二、二维图形绘制

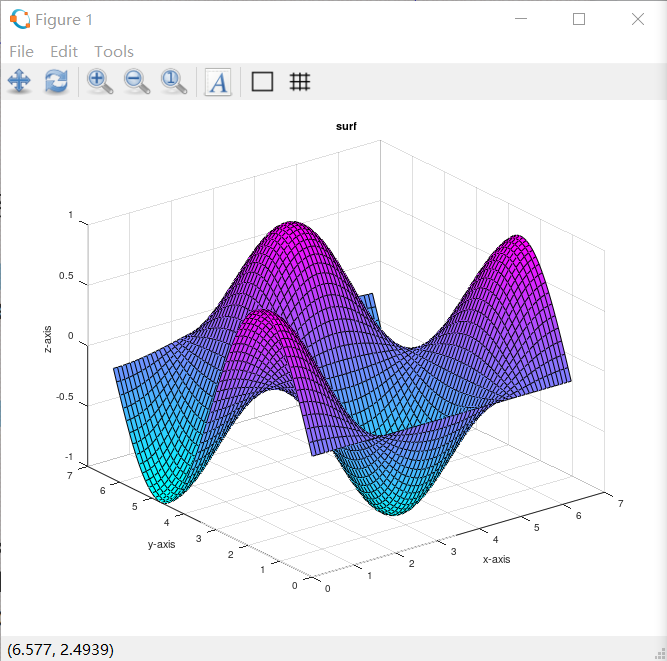
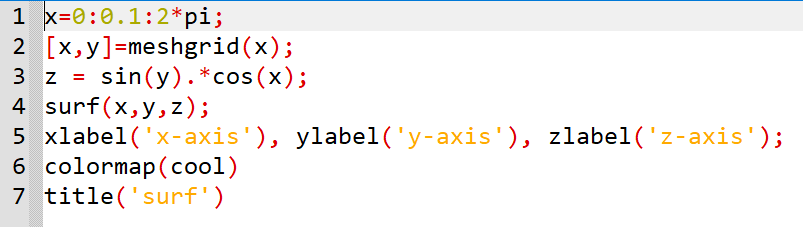
1. 用三维曲面图表现函数z=sin(y)cos(x)

**程序1（使用mesh绘图）：**

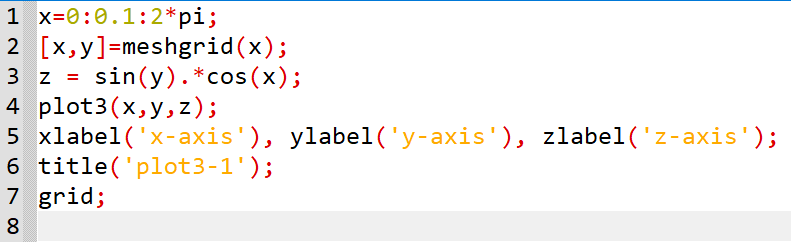


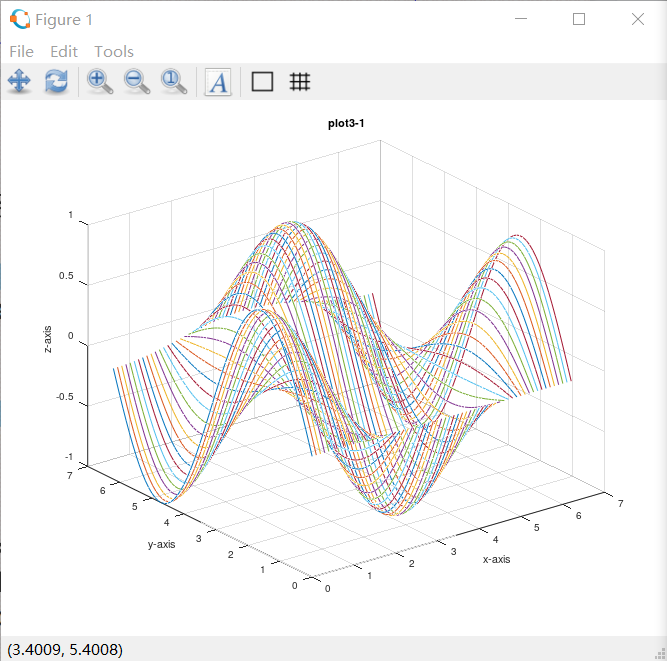


**程序2（使用surf绘图）：**

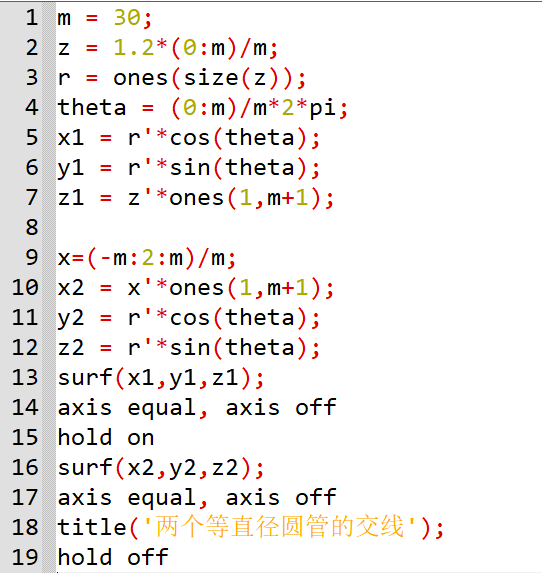


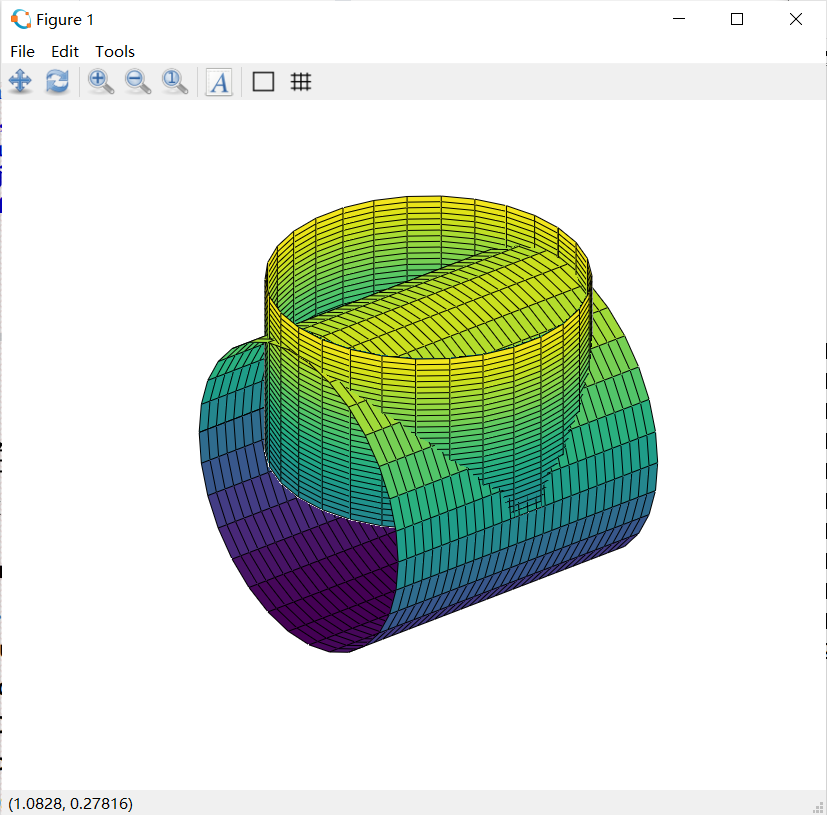
程序3（使用plot3绘图）：



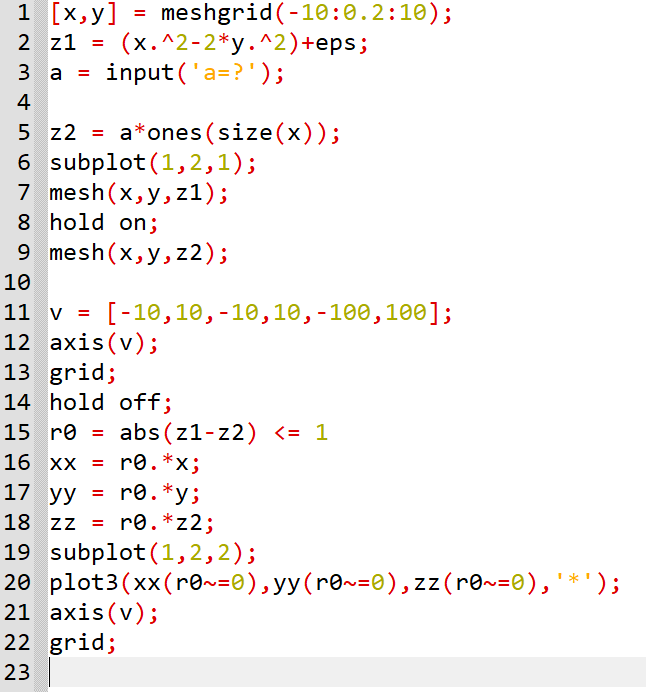


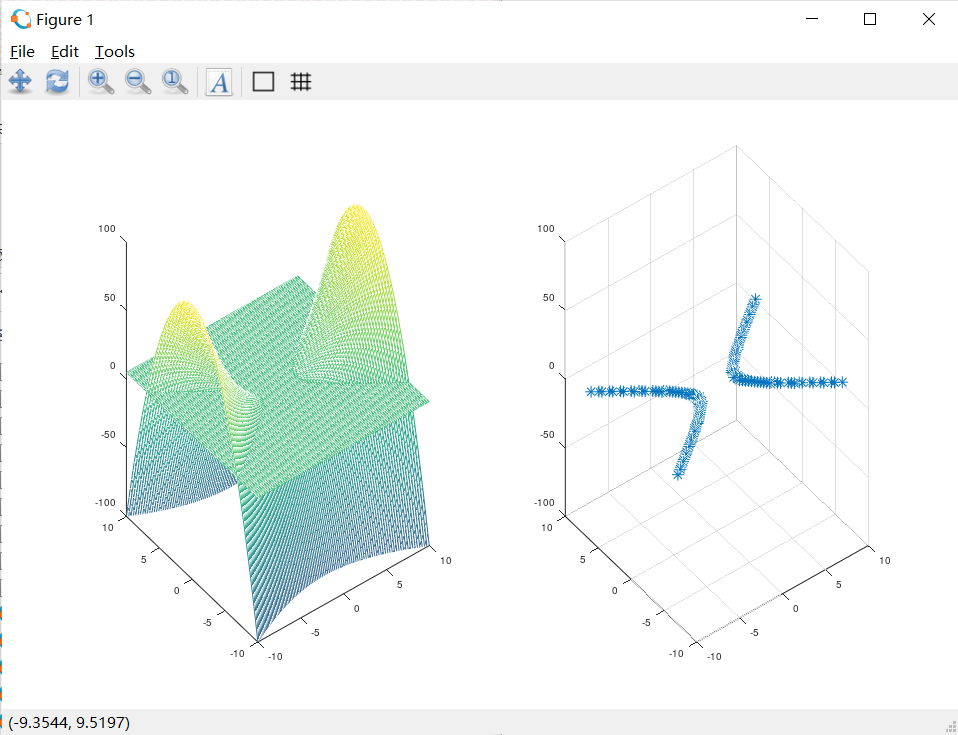
2. 绘制两个直径相等的圆管的相交图形



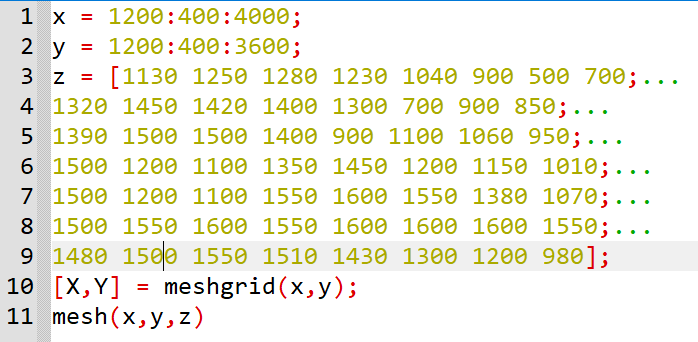


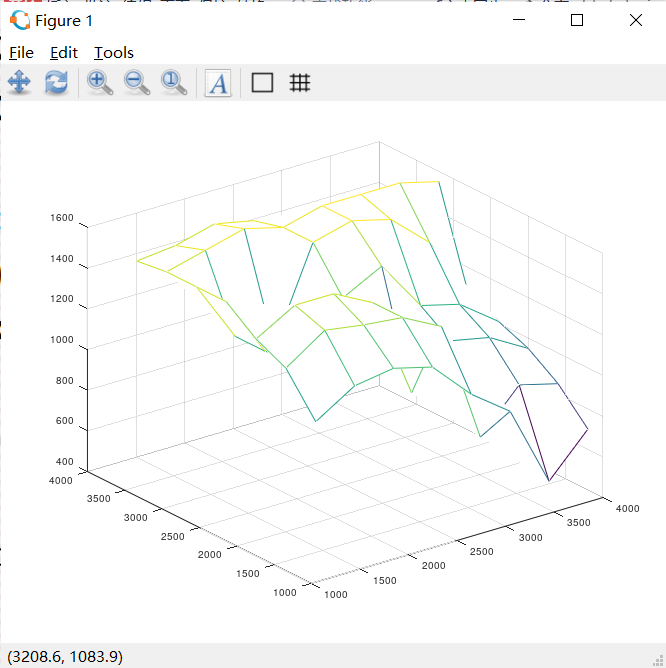
3. 分析由函数z=x2-2y2构成的曲面形状及与平面z=a的交线





4. 绘制山区地貌图





5. 绘制三维曲线的图形

