```
Display () {

X ← 0
Y ← 0

#user input

d = int(input(“ Enter d value: “))
smallRadius = int(input(“ Enter r value: “))
bigRadius = int(input(“ Enter R value: “))

radianConvert = math.pi/180

newDistance = d * radianConvert
newSmallRadius = smallRadius * radianConvert
newBigRadius =  bigRadius * radianConvert


#Calculate theta

C = (2 * math.pi * LCM(smallRadius, bigRadius) / bigRadius))
A = 0.0

glBegin
While (A < C) {
        nX = (newSmallRadius - newBigRadius) * cos(A) + newDistance * cos(newSmallRadius
- newBigRadius) / (newBigRadius)) * A

        nY = (newSmallRadius - newBigRadius) * sin(A) + newDistance * sin(newSmallRadius
- newBigRadius) / (newBigRadius)) * A

        y = nY
        x = nX

        glVertex2f(x, y)
        A += 0.5
glEND()
glFlush()
}
```

```
main() {

        glutInit(())
        glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB)
        glutInitWindowPosition(10, 10)
        glutInitWindowSize(300, 300)
        glutCreateWindow("Project1 AJ")
        glutDisplayFunc(display)
        glutMainLoop()

}
```