GEODESICS FOR A CYLINDRICAL SURFACE

SOURCE CODE:

clc

clear

clf

c=input("Enter constant:")

a=input("Enter value of radial distance of cylinder:")

r=0:0.1:10\*%pi

function A=f(r, z)

A=c\*a/(sqrt(1-c^2))

endfunction

z=ode(0,0,r,f)

x=a\*cos(r)

y=a\*sin(r)

param3d1(x,y,z,150,50,flag=[2,4])

title("Shortest helical path between two points on a cylinder")

OUTPUT:

Enter constant:0.1

Enter value of radial distance of cylinder:1

