ENGINEERING MATHEMATICS-II SCILAB PRACTICAL
ACADEMIC YEAR: 2020-21

NAME of EXERCISE: Curve Tracing
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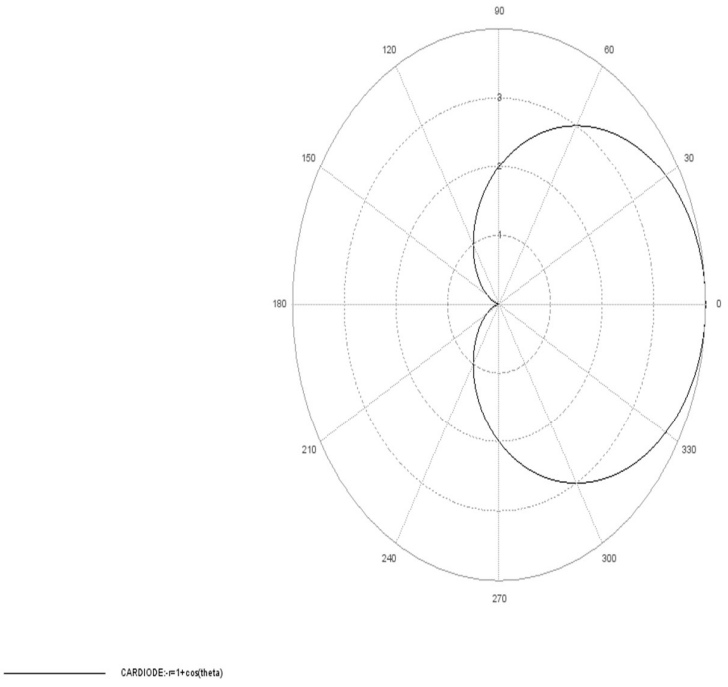
BRANCH: Computer DIV: J1 DATE:17-6-21

QUESTION: Trace the curve given by r=a(1+cosθ)

CODE:

```
theta=0:.01:2*%pi;  //populate vector θ with values from 0 to 2π in steps of 0.01
a=2;                // 'a'can be given different integer values.
r=a*(1+cos(theta));
polarplot(theta,r,leg="CARDIODE:-r=1+cos(theta)") // draw the graph in polar
                                                  //coordinates of θ verses r
```

OUTPUT:



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123.sce (C:\Users\AYUSH JAIN\OneDrive\Desktop\123.sce) - SciNotes

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123.sce (C:\Users\AYUSH JAIN\OneDrive\Desktop\123.sce) - SciNotes

123.sce

```
1 theta=0:.01:2*%pi;
2 a=2;
3 r=a*(1+cos(theta));
4 polarplot(theta,r,leg="CARDIODE:-r=1+cos(theta)")
5
```