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%first taking the radius from the user
r = input('pls enter the radius of circle');
a = input('now inter the x-coordinate');
b = input('now inter the y=coordinate');

%th = linspace(0,2*pi,1000);
th = 0:0.1:2*pi;

x = a + r*cos(th);
y = b + r*sin(th);
plot(x,y)
title('Circle drawn by Name-Deepak Kuntal and Roll no. UE219018')
xlabel('X-axis')
ylabel('Y-axis')

//pentagon
//
centerX = input(' please enter the X-coordinate of the center'); % X-coordinate of the center
centerY = input('please enter the Y-coordinate of the center'); % Y-coordinate of the center
sideLength = input('enter the raduis of circle that circumscribing the pentagon');
% Calculate the coordinates of the five vertices of the pentagon
theta = 2*pi/5; % Angle between each vertex (72 degrees)
pentagonVerticesX = centerX + sideLength * cos(0:theta:2*pi);
pentagonVerticesY = centerY + sideLength * sin(0:theta:2*pi);

plot(pentagonVerticesX, pentagonVerticesY, 'r', 'LineWidth', 2);

title('Regular Pentagon plot by UE219018 Deepak Kuntal ');
xlabel('X-axis');
ylabel('Y-axis');
grid on;

```