





```
function [alpha,beta] = InverseKinematics(x,y)
a = 200;
b = 180;
R = realsqrt(x*x + y*y);

if a+b < R
    alpha = pi - atan2(-y, (x+0.00001));
    beta = pi;

elseif R < a-b
    alpha = pi - atan2(-y, (x+0.00001));
    beta = 0;

else
    beta = acos((a*a + b*b - R*R)/(2*a*b));
    M = acos((a*a - b*b + R*R)/(2*a*R));
    alpha = pi - M - atan2(-y, (x+0.00001));
end
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