```
function myifsgasket(max_iterations)


parameters =[
1/2   1/2 0 0     0;
1/2   1/2 0 1/4   3^(1/2)/4;
1/2 1/2 0   1/2 0];

[n,m]  = size(parameters);


xscale = parameters(:,1);
yscale = parameters(:,2);
theta  = parameters(:,3);
shift  = [ parameters(:,4)'; parameters(:,5)' ];


Map = zeros(2,2,n);

for i=1:n

rotation = [ cosd(theta(i)) -sind(theta(i)) ; sind(theta(i))
cosd(theta(i)) ];
scale    = [ xscale(i) 0 ; 0 yscale(i) ];
Map(:,:,i) = rotation*scale;

end

x = zeros(2,max_iterations);
y = [0;0];

for i = 1:100
pick = randi([1 n]);
     y = Map(:,:,pick)*y + shift(:,pick);
end

x(:,1) = y;

for i = 2:max_iterations
pick = randi([1 n]);
x(:,i) = Map(:,:,pick)*x(:,i-1) + shift(:,pick);
end

plot(x(1,:),x(2,:),'b.','MarkerSize',0.1)
axis equal
%axis off
end
```