```matlab
                if (isnan(g(1,1,k)) == 1) || (isnan(g(1,2,k)) == 1)
                    ConjugateSteps(i,j) = 5000;
                    ConjugateValues(i,j) = 1;↵
;
                    break
                end
                if (isinf(g(1,1,k)) == 1) || (isinf(g(1,2,k)) == 1)
                    ConjugateSteps(i,j) = 5000;
                    ConjugateValues(i,j) = 1;↵
;
                    break
                end
                gT(:,:,k) = transpose(g(:,:,k));
                beta(k-1) = (g(:,:,k)*gT(:,:,k))/(g(:,:,k-1)*gT(:,:,k-1));
                d(:,:,k) = -gT(:,:,k)+(beta(k-1)*dT(:,:,k-1));
                dT(:,:,k) = transpose(d(:,:,k));
                %if the algorithm gets to the maximum number of steps without
                %satisfying any of the above criteria for convergence, or
                %divergence, then the max number of steps is recorded
                if k == 5000
                    ConjugateSteps(i,j) = k;
                    ConjugateValues(i,j) = f(Z(1,1,1),Z(2,1,1));
                    break
                end
            end
        end
end

xAxis = linspace(-2,2,201);
yAxis = linspace(-2,2,201);

subplot(2,2,1:2)
%this plot will show the number of iterations it took
contourf(xAxis,yAxis,ConjugateSteps);
xlabel('x');
ylabel('y');
title('Conjugate Gradient Method with Fletcher-Reeves # of Steps');
colorbar;
subplot(2,2,3:4)
ConjugateValuesReal = real(ConjugateValues);
contourf(xAxis,yAxis,ConjugateValuesReal);
xlabel('x');
ylabel('y');
title('Binary Convergence Plot x=[-2:2], y=[-2:2]');
colorbar;
```