```
                receivers(i) = 1;
                end
                if x(num_parameters*i-3) < 1.5
                transmitters(i) = 1;
                end
            end
        end

        % Using matrix multiplication to set power to all the receivers to equal 0
        powers = powers.*transmitters;

        % This calls the cost function from the cost_function.m file.
        C = cost_function(quantity,diameters,powers,receivers,transmitters, ↙
year_built);

        % This calls the gain function from the loop_gain_function.m file.
        % Gain is negative because it is being minimized.
        % The gain will be multiplied by -1 after the last generation of the GA to ↙
make it positive.
        G = -loop_gain_function(quantity,diameters,powers,receivers,transmitters,k, ↙
lambda);

    end % end objectiveFunction()

end % radar_optimization()
```