

---

```
clc; clear; close all;

odds_vector = 0:.1:1; % a vector of all different odds

number_of_trials = 1000000; % number of trials

count_of_total = 0; % counter var for probability

trial_storage = 0:10; % holding var for plotting

for i = odds_vector % runs the loop for each odds

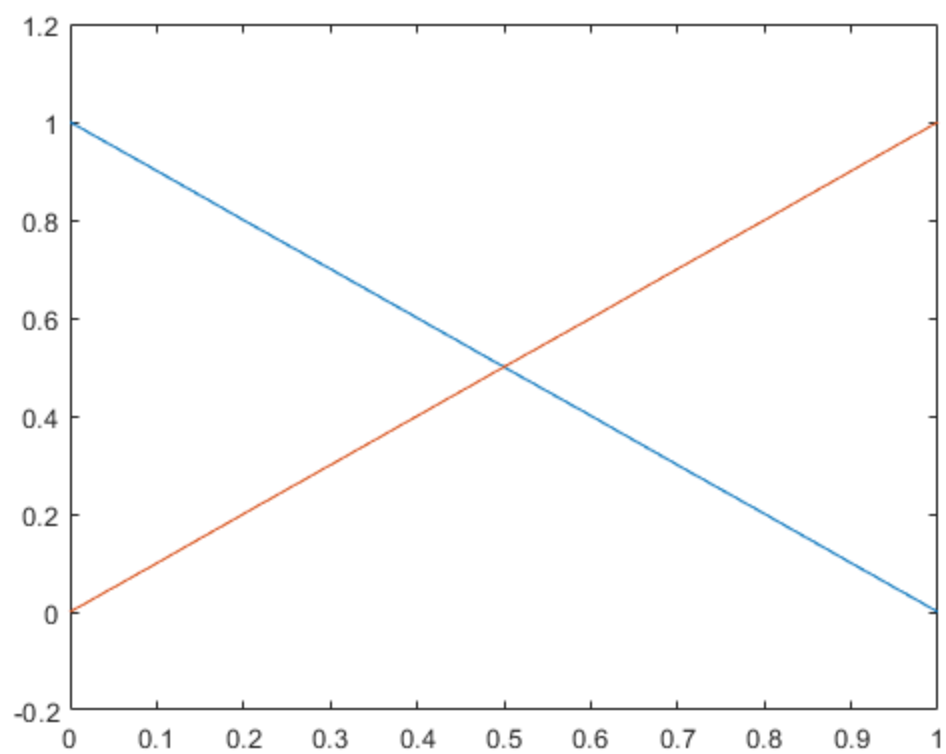
    increment = (10*i)+1; % a increment of the trial storage

    count_of_total = 0;

    for m = 0:number_of_trials % runs the number of trials times
        count_of_total = count_of_total + ruin(i); % counts the number of
        bankruptsys
    end
    trial_storage(increment) = count_of_total/number_of_trials; % takes the
    average of the number of bankruptsys

end

plot(odds_vector,trial_storage) %plots the data
hold on
plot(odds_vector,1-trial_storage)
```



*Published with MATLAB® R2022b*