**Assignment3 Part A**

The two-triangle problem is just an illusion.

**Assignment3 Part B**

**clear**

**N=input('How many N? ');**

**p=1**

**P=0;**

**for t=1:N**

**P = 1-p;**

**p=((365-t)/365);**

**P = P**

**end**

Command Window

>> Assingment3PartB

How many N? 30

p =

1

P =

0

P =

0.0027

P =

0.0055

P =

0.0082

……….-🡪02

P =

0.0795

**clear**

**win = 0;**

**contestant = 1;**

**for t = 1:10000 %10000 times**

**car= randi (3); %1, 2, or 3**

**firstpick = randi (3); %first random door picked**

**if car==1**

**reveal=rand(2:3);**

**end**

**if car==2**

**reveal=rand(1:3);**

**end**

**if car ==3**

**reveal=rand(1:2);**

**end**

**secondPick =rand(1:3);**

**%a few more lines code**

**%monte Hall switching**

**if contestant == car**

**win = win+1;**

**end**

**end**

**disp("Switching Results in: " + win + "/" + t + " wins, as opposed to " + contestant + "/" + t + " wins for staying.")**

**disp("So, switching is the better strategy.")**

**Command Windows**

>> Assingment3PartC

Switching Results in: 6675/10000 wins, as opposed to 3325/10000 wins for staying.

So, switching is the better strategy.