

```
(* Monty Hall Problem *)
max = 1000000;
k=1;
wins=0;
While[ k<=max,
  cardoor =RandomInteger[{1,3}];
  guessdoor = RandomInteger[{1,3}];
  Label[tryagain];
  goatdoor =RandomInteger[{1,3}];
  If[goatdoor== cardoor, Goto[tryagain]];
  If[goatdoor== guessdoor, Goto[tryagain]];
  If[guessdoor==1 && goatdoor == 2,moveto =3];
  If[guessdoor==1 && goatdoor == 3,moveto =2];
  If[guessdoor==2 && goatdoor ==1, moveto= 3];
  If[guessdoor==2 && goatdoor ==3, moveto=1];
  If[guessdoor==3 && goatdoor ==1, moveto =2];
  If[guessdoor==3 && goatdoor ==2, moveto =1];
  If[moveto ==cardoor,wins++];
  k++;]
percent = (wins/max)*100.;
Print["Winning Percentage ",N[percent]];
```