```
n = 10 000 000;
SumOfAllWinnings = 0;
maxWin = 2;

For[i = 1, i ≤ n, i++,

  notTails = True;
  pot = 2;

  (* loop until you get a tails *)
  While[notTails,
    (* 0 is heads / 1 is tails *)
    flip = RandomInteger[{0, 1}];
    If[ flip == 0,
        pot = pot * 2;
      , (* else *)
        notTails = False;
    ];

  ]; (* end while *)

  SumOfAllWinnings = SumOfAllWinnings + pot;
  If[pot > maxWin,
      maxWin = pot;
  ];

];

Print["We did the St. Petersburg Paradox ", n, " times"];
Print["The average win was: ", N[SumOfAllWinnings / n]];
Print["The max win was: ", maxWin];
```

We did the St. Petersburg Paradox 10 000 000 times

The average win was: 23.4271

The max win was: 8 388 608