calculations – six coins

given coin is fair:

probability six heads = $1/2^6$ = 1/64

probability six tails = $1/2^6$ = 1/64

probability either = 2/64 ~ 3%

H_0 – coin is fair

H_1 – coin is not-fair

likelihood (HHHHHH or TTTTTT | H_0) < 5%

your experiment

toss 6 coins

record how many heads or tails

if HHHHHH or TTTTTTT

you can reject H_0 with p< 5%

see how many times you do it before

you get 6 in a row