Code the estimator

$$\text{Ways for } p \text{ to produce } W,L = (4p)^W \times (4-4p)^L$$

```
# function to compute posterior distribution
compute_posterior <- function( the_sample , poss=c(0,0.25,0.5,0.75,1) ) {
    W <- sum(the_sample=="W") # number of W observed
    L <- sum(the_sample=="L") # number of L observed
    ways <- sapply( poss , function(q) (q*4)^W * ((1-q)*4)^L )
    post <- ways/sum(ways)
    bars <- sapply( post, function(q) make_bar(q) )
    data.frame( poss , ways , post=round(post,3) , bars )
}
```