

Exercise

3. To evaluate a portfolio of options for its total value.

```
GBSOption(TypeFlag = "p", S = 3500, X = 3765,  
           Time = 1/12, r = 0, b = 0, sigma = 0.3)@price  
## [1] 300.0049  
df <- data.frame(type = sample(c("c", "p"), 100, replace = T),  
                  strike = round(runif(100) * 100, 0),  
                  underlying = round(runif(100) * 100, 0),  
                  Time = 1,  
                  r = 0.01,  
                  b = 0,  
                  sigma = 0.3)
```