

$e=2.7183$

Coupon= $C$

Face value= $F$

The number of coupon payments= $n$

$j=\text{seq}(0.5, n, \text{by}=0.5)$

$y=c(y(0.5), y(1), y(1.5), \dots, y(n))$

$P=\text{sum}(C * e^{-(y_j * j)}) + F * e^{-(y(n) * n)}$

$q()$