Homework 3

Group Member: Yingshan He (yh29) Shixue Feng (shixuef2)

1.(a) Price of ABC call option = 5.85858908627274

Price of ABC put option = 4.60529379607787

Price of ABC call option = 5.92023255942269

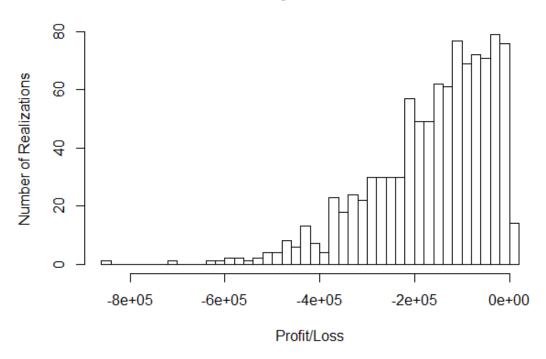
Price of DEF put option = 6.82528962413029

Value of the portfolio = -113765.386028316

(b) Estimate of 1% VaR = 525439.5

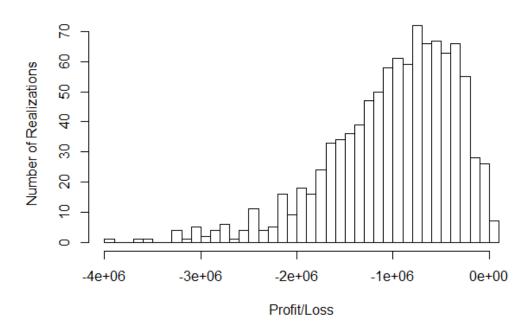
(c)

VaR by MC Normal



2. Estimate of 1% VaR for 21 days = 3049707

VaR by MC Normal (21 days)



3.(a) Estimate of 1% VaR by t-distribution = 911786.3

(b)

VaR by MC t_distribution

