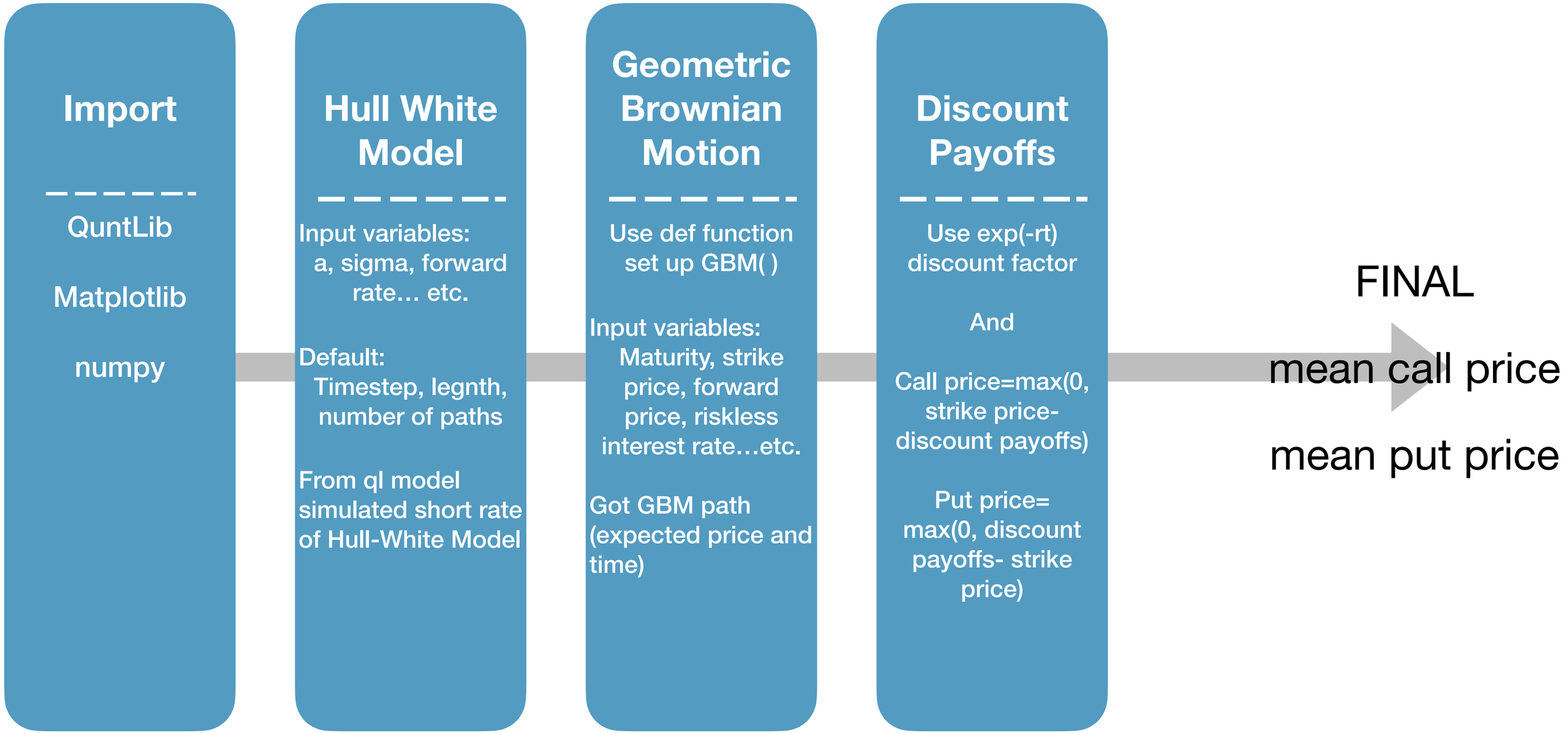
Import
QuntLib
Matplotlib
numpy
Hull White Model
Input variables:
a, sigma, forward rate… etc.
Default:
Timestep, legnth, number of paths
From ql model simulated short rate of Hull-White Model
Geometric Brownian Motion
Use def function set up GBM( )
Input variables:
Maturity, strike price, forward price, riskless interest rate…etc.
Got GBM path (expected price and time)
Discount Payoffs
Use exp(-rt) discount factor
And
Call price=max(0, strike price-discount payoffs)
Put price= max(0, discount payoffs- strike price)
FINAL
mean call price
mean put price