# Historical CVaR(95%) Analysis

## Python Code

# Historical CVaR 95  
cvar\_95 = StockReturns\_perc[StockReturns\_perc <= var\_95].mean()  
print(cvar\_95)  
  
# Sort the returns for plotting  
sorted\_rets = sorted(StockReturns\_perc)  
  
# Plot the probability of each return quantile  
plt.hist(sorted\_rets, density=True, stacked=True)  
  
# Denote the VaR 95 and CVaR 95 quantiles  
plt.axvline(x=var\_95, color="r", linestyle="-", label='VaR 95: {0:.2f}%'.format(var\_95))  
plt.axvline(x=cvar\_95, color="b", linestyle="-", label='CVaR 95: {0:.2f}%'.format(cvar\_95))  
plt.legend()  
plt.show()

## Explanation

This code computes the Conditional Value at Risk (CVaR 95%), which represents the average loss beyond the worst 5% of historical return values. It plots a histogram of returns and marks both VaR and CVaR on the chart using vertical lines for visual understanding.

## Plot Image

