1. Common strategies:
   - Convertible arbitrage:
     + Exploit mispricings in price of convertible securities (convertible bonds, convertible preferred stocks, warrants)
     + Long undervalued convertible securities + short stock
     + Increase stock volatility → Increase embedded option value → increase convertible securities value
   - Distressed securities:
     + Distressed securities are undervalued → offer superior return
     + Illiquid → Long-only
     - Emerging markets: Long-only, no derivatives to hedge
   - Equity market neutral:
     - Hedge equity strategies: Long undervalued securities + short overvalued securities (pairs trading) → gain on mispricing, but not eliminate systematic risk
   - Fixed income arbitrage:
     - Long / short position in fixed income based on expected changes in yield curve / credit spread
   - Global macro strategies:
     - Take position in major financial / nonfinancial markets. Focus on entire group / area on investment
   - Merger arbitrage:
     - Earn return from merger, spin-offs, takeover
   - Fund of funds:
     - Consist several funds (10-30)
     + Diversify among hedge fund manager / style
     + Total fee = fee to manager of FOF + fee to manager of each fund
     + Cash drag issue: reserve extra cash to meet potential withdrawals of investors
     + Style drift issue: individual hedge fund may change its investment strategy

2. Structure:
   - Compensation structure:
     + Asset under management fee (1%-2%)
     + Incentive fee (20%): encourage manager to earn higher profit
     + High water marks: avoid double incentive fee
     + Lock-up period: limit withdrawals by require minimum investment period + designated exit time

3. Performance evaluation issues:
   - Absolute-return vehicles: fund target absolute periodic return. No benchmark exists
   - Considerations on performance of hedge fund:
     - Lock-up period: longer lock-up period → higher returns
     + Younger fund → higher returns
     + Smaller fund → higher returns
   - Returns: smoothen by using rolling returns (e.g.: 12 month average return)
   - Deleverage: investments are treated as if they were fully paid for
   - Risk: hedge fund returns are usually skewed, with fat tails → standard deviation fails to measure true risk
   - Downside deviation: too focus on negative returns → not penalise for high positive returns → increase standard deviation

4. Sharpe ratio issues:
   - Time dependency: Annual Sharpe ratio is estimated using shorter time period, if estimate Sharpe ratio using quarterly returns:
     + Quarterly returns x 4
     + Quarterly standard deviation x √4
     → upward bias Sharpe ratio
   - Assume normality: assume normal distribution → inappropriate
   - Assume liquidity: infrequent / missing / assumed return observations → upward bias Sharpe ratio
   - Assume uncorrelated returns: correlated returns → artificially lower standard deviation
   - Stand-alone measure: do not consider diversification effect

5. Benchmark:
   - Composing methods:
     + Selection criteria: vary, in term of assets under management, length of track record, restrictions on new investments
     + Style classification: vary, as how to classify a fund by style
     + Weighting scheme: equally weighted / based upon assets under management
     + Rebalancing rules: must be defined, frequency can vary (monthly to annually)
   - Index providers:
     + CISDM: cover both hedge funds and managed futures
     + Credit Suisse: multiple benchmark for different strategies; weighting based upon assets under management
     + EACM Advisers: equally weighted 100 funds in many categories
     + Hedge fund intelligence: equally hedge fund invested in Europe and Asia
     + HFR: equally/assets weighted index + equally weighted sub-indexes based on managers' reporting of hedge fund returns
     + Morningstar MSCI: index classified to 5 basic categories, each category are separate based on region and asset class
   - Hedge fund issues:
     + Relevance of past data
     + Popularity bias: inflow of investment to a fund will mislead the index
     + Survivorship bias: index may drop funds with poor track records / failed funds
     + Stale price bias: appraisal / infrequent pricing → understate volatility
     + Backfill / inclusion bias: filling missing past data → bias index