

Example of Dynamic SQL Selecting a Table

```
# get table belonging to that sector
sql = f"select mc_table from sector where sector_name = '{answer}'"
# run query to get dataframe
mc_df = db.alc_query(sql)
# get appropriate monte carlo table as a string
mc_table = mc_df["mc_table"].iloc[0]
# use this to query from the correct mc_table
sql = f"select return, volatility, sharpe from {mc_table}"
df = db.alc_query(sql)
```

Example of Dynamic SQL Selecting Columns in a Table

```
# get tickers belonging to that sector - use lowercased & replaced fieldnames
sql = f"select p.ticker from portfolio p, sector s where s.sector_id = p.sector_id and s.sector_name = '{answer}'"
# run query to get dataframe
ticker_df = db.alc_query(sql)
# make tickers a list from a dataframe
# first lowercasing them
ticker_lst = [ticker.lower() for ticker in ticker_df["ticker"]]
# then replacing any "=" characters
ticker_lst = [ticker.replace("=", "_") for ticker in ticker_lst]
# put them in a comma separated string
columns = ", ".join(ticker_lst)
# use this to select just these tickers from table
sql2 = f"select price_date, {columns} from log_returns"
# run query to get dataframe
df = db.alc_query(sql2)
```