

## Data dictionary

Column Name	Data Type	Dataset	Description
<a href="#">date</a>	int64	hackathon_sample	Observation date in YYYYMMDD format, often used to track stock or portfolio changes over time.
<a href="#">ret_eom</a>	int64	hackathon_sample	Stock return at the end of the month, commonly used to measure performance.
<a href="#">permno</a>	int64	hackathon_sample	Permanent identifier for stocks in the database, useful for tracking across time periods.
<a href="#">shrcd</a>	int64	hackathon_sample	Code representing the share type, distinguishing between different equity classes.
<a href="#">exchcd</a>	int64	hackathon_sample	Stock exchange code, identifying the market where the stock is traded.
<a href="#">mspread</a>	float64	hackathon_sample	Median bid-ask spread, a measure of market liquidity.
<a href="#">year</a>	int64	hackathon_sample	Year corresponding to the observation date.
<a href="#">month</a>	int64	hackathon_sample	Month corresponding to the observation date.
<a href="#">size_port</a>	object	hackathon_sample	Portfolio size classification, often based on market capitalization.
<a href="#">rf</a>	float64	hackathon_sample	Risk-free rate, used as a benchmark for return calculations.
<a href="#">stock_exret</a>	float64	hackathon_sample	Stock excess return over the risk-free rate.
<a href="#">stock_ticker</a>	object	hackathon_sample	Unique ticker symbol for the stock.
<a href="#">cusip</a>	object	hackathon_sample	Committee on Uniform Securities Identification Procedures (CUSIP) identifier.
<a href="#">comp_name</a>	object	hackathon_sample	Company name associated with the stock.
<a href="#">eps_medest</a>	float64	hackathon_sample	Median analyst estimate for earnings per share (EPS).
<a href="#">eps_meanest</a>	float64	hackathon_sample	Mean analyst estimate for earnings per share (EPS).
<a href="#">eps_stdevest</a>	float64	hackathon_sample	Standard deviation of analyst EPS estimates, indicating dispersion.
<a href="#">eps_actual</a>	float64	hackathon_sample	Actual reported earnings per share (EPS).
<a href="#">prc</a>	float64	hackathon_sample	Stock price, used for valuation and return calculations.
<a href="#">market_equity</a>	float64	hackathon_sample	Market Equity
<a href="#">div12m_me</a>	float64	hackathon_sample	Dividend yield
<a href="#">chcsho_12m</a>	float64	hackathon_sample	Change in shares outstanding over the past 12 months.
<a href="#">eqnpo_12m</a>	float64	hackathon_sample	Net equity payout
<a href="#">ret_1_0</a>	float64	hackathon_sample	Return over the past 1 month.
<a href="#">ret_3_1</a>	float64	hackathon_sample	Return over the past 3 months.
<a href="#">ret_6_1</a>	float64	hackathon_sample	Return over the past 6 months.
<a href="#">ret_9_1</a>	float64	hackathon_sample	Return over the past 9 months.
<a href="#">ret_12_1</a>	float64	hackathon_sample	Return over the past 12 months.
<a href="#">ret_12_7</a>	float64	hackathon_sample	Return over the past 12 months excluding the most recent 6 months.
<a href="#">ret_60_12</a>	float64	hackathon_sample	Return over the past 60 months excluding the most recent 12 months.
<a href="#">seas_1_1an</a>	float64	hackathon_sample	Seasonal return over 1 month, annualized.
<a href="#">seas_1_1na</a>	float64	hackathon_sample	Seasonal return over 1 month, non-annualized.
<a href="#">seas_2_5an</a>	float64	hackathon_sample	Seasonal return over 2-5 months, annualized.
<a href="#">seas_2_5na</a>	float64	hackathon_sample	Seasonal return over 2-5 months, non-annualized.
<a href="#">at_gr1</a>	float64	hackathon_sample	Asset Growth
<a href="#">sale_gr1</a>	float64	hackathon_sample	Sales growth (1 year)
<a href="#">capx_gr1</a>	float64	hackathon_sample	CAPEX growth (1 year)
<a href="#">inv_gr1</a>	float64	hackathon_sample	Inventory growth
<a href="#">debt_gr3</a>	float64	hackathon_sample	Growth in book debt (3 years)

sale_gr3	float64	hackathon_sample	Sales growth over the past 3 years.
capx_gr3	float64	hackathon_sample	CAPEX growth (3 years)
inv_gr1a	float64	hackathon_sample	Inventory change
lti_gr1a	float64	hackathon_sample	Change in long-term investments
sti_gr1a	float64	hackathon_sample	Change in short-term investments.
coa_gr1a	float64	hackathon_sample	Change in current operating assets
col_gr1a	float64	hackathon_sample	Change in current operating liabilities
cowc_gr1a	float64	hackathon_sample	Change in current operating working capital
ncoa_gr1a	float64	hackathon_sample	Change in noncurrent operating assets
ncol_gr1a	float64	hackathon_sample	Change in noncurrent operating liabilities
nncoa_gr1a	float64	hackathon_sample	Change in net noncurrent operating assets
fnl_gr1a	float64	hackathon_sample	Change in financial liabilities
nfna_gr1a	float64	hackathon_sample	Change in net financial assets
tax_gr1a	float64	hackathon_sample	Tax expense surprise
be_gr1a	float64	hackathon_sample	Change in common equity
ebit_sale	float64	hackathon_sample	Profit margin
gp_at	float64	hackathon_sample	Gross profits-to-assets
cop_at	float64	hackathon_sample	Cash-based operating profits-to-book assets
ope_be	float64	hackathon_sample	Operating profitability to book equity ratio.
ni_be	float64	hackathon_sample	Return on equity
ebit_bev	float64	hackathon_sample	Return on net operating assets
netis_at	float64	hackathon_sample	Net total issuance
eqnetis_at	float64	hackathon_sample	Net equity issuance
dbnetis_at	float64	hackathon_sample	Net debt issuance
oaccruals_at	float64	hackathon_sample	Operating accruals
oaccruals_ni	float64	hackathon_sample	Percent operating accruals
taccruals_at	float64	hackathon_sample	Total accruals scaled by total assets, a measure of earnings quality.
taccruals_ni	float64	hackathon_sample	Total accruals scaled by net income, an indicator of the relationship between accruals and earnings.
noa_at	float64	hackathon_sample	Net operating assets
opex_at	float64	hackathon_sample	Operating expenses scaled by total assets, reflecting operational efficiency.
at_turnover	float64	hackathon_sample	Capital turnover
sale_bev	float64	hackathon_sample	Sales to enterprise value ratio.
rd_sale	float64	hackathon_sample	Research and development (R&D) expenditure to sales ratio.
cash_at	float64	hackathon_sample	Cash-to-assets
sale_emp_gr1	float64	hackathon_sample	Sales growth per employee over the past year, an indicator of productivity.
emp_gr1	float64	hackathon_sample	Hiring rate
ni_inc8q	float64	hackathon_sample	Number of consecutive quarters with earnings increases
noa_gr1a	float64	hackathon_sample	Change in net operating assets
ppeinv_gr1a	float64	hackathon_sample	Change in property, plant, and equipment investments over the past year.
lnoa_gr1a	float64	hackathon_sample	Change in long-term net operating assets
capx_gr2	float64	hackathon_sample	CAPEX growth (2 years)
saleq_gr1	float64	hackathon_sample	Quarterly sales growth.
niq_be	float64	hackathon_sample	Quarterly return on equity
niq_at	float64	hackathon_sample	Quarterly return on assets
niq_be_chg1	float64	hackathon_sample	Change in quarterly return on equity
niq_at_chg1	float64	hackathon_sample	Change in quarterly net income scaled by total assets.

rd5_at	float64	hackathon_sample	Research and development (R&D) expenditure scaled by total assets over 5 years.
dsale_dinv	float64	hackathon_sample	Change sales minus change inventory
dsale_drec	float64	hackathon_sample	Change sales minus change receivables
dgp_dsale	float64	hackathon_sample	Change gross margin minus change sales
dsale_dsga	float64	hackathon_sample	Change sales minus change SG&A
saleq_su	float64	hackathon_sample	Standardized unexpected quarterly sales.
niq_su	float64	hackathon_sample	Standardized earnings surprise
capex_abn	float64	hackathon_sample	Abnormal corporate investment
op_atl1	float64	hackathon_sample	Operating profitability scaled by lagged total assets.
gp_atl1	float64	hackathon_sample	Gross profits-to-lagged assets
ope_bel1	float64	hackathon_sample	Lagged operating profitability to book equity ratio.
cop_atl1	float64	hackathon_sample	Cash-based operating profitability scaled by lagged total assets.
pi_nix	float64	hackathon_sample	Profitability index based on net income.
ocf_at	float64	hackathon_sample	Operating cash flow to assets
op_at	float64	hackathon_sample	Operating profitability scaled by total assets.
ocf_at_chg1	float64	hackathon_sample	Change in operating cash flow to assets
at_be	float64	hackathon_sample	Book leverage
ocfq_saleq_std	float64	hackathon_sample	Standard deviation of operating cash flow to sales ratio over time.
tangibility	float64	hackathon_sample	Asset tangibility
earnings_variability	float64	hackathon_sample	Earnings variability
aliq_at	float64	hackathon_sample	Liquidity of book assets
f_score	float64	hackathon_sample	Piotroski F-score
o_score	float64	hackathon_sample	Ohlson O-score
z_score	float64	hackathon_sample	Altman Z-score
intrinsic_value	float64	hackathon_sample	Intrinsic value-to-market
kz_index	float64	hackathon_sample	Kaplan-Zingales index
ni_ar1	float64	hackathon_sample	Earnings persistence
ni_ivol	float64	hackathon_sample	Earnings volatility
at_me	float64	hackathon_sample	Assets-to-market
be_me	float64	hackathon_sample	Book-to-market equity
debt_me	float64	hackathon_sample	Debt-to-market
netdebt_me	float64	hackathon_sample	Net debt-to-price
sale_me	float64	hackathon_sample	Sales scaled by market equity, a valuation measure.
ni_me	float64	hackathon_sample	Earnings-to-price
ocf_me	float64	hackathon_sample	Operating cash flow scaled by market equity.
fcf_me	float64	hackathon_sample	Free cash flow-to-price
eqpo_me	float64	hackathon_sample	Payout yield
eqnpo_me	float64	hackathon_sample	Net payout yield
rd_me	float64	hackathon_sample	Research and development (R&D) expenditure scaled by market equity.
bev_mev	float64	hackathon_sample	Book-to-market enterprise value
ebitda_mev	float64	hackathon_sample	EBITDA-to-market enterprise value
aliq_mat	float64	hackathon_sample	Liquidity of market assets
eq_dur	float64	hackathon_sample	Equity duration
beta_60m	float64	hackathon_sample	Market Beta
resff3_12_1	float64	hackathon_sample	Residuals from the Fama-French 3-factor model over the past 12 months.
resff3_6_1	float64	hackathon_sample	Residuals from the Fama-French 3-factor model over the past 6 months.

<a href="#">mispricing_mgmt</a>	float64	hackathon_sample	Mispricing factor: Management
<a href="#">mispricing_perf</a>	float64	hackathon_sample	Mispricing factor: Performance
<a href="#">ivol_capm_21d</a>	float64	hackathon_sample	Idiosyncratic volatility from the CAPM (21 days)
<a href="#">iskew_capm_21d</a>	float64	hackathon_sample	Idiosyncratic skewness from the CAPM
<a href="#">coskew_21d</a>	float64	hackathon_sample	Coskewness
<a href="#">beta_dimson_21d</a>	float64	hackathon_sample	Dimson beta
<a href="#">ivol_ff3_21d</a>	float64	hackathon_sample	Idiosyncratic volatility from the Fama-French 3-factor model
<a href="#">iskew_ff3_21d</a>	float64	hackathon_sample	Idiosyncratic skewness from the Fama-French 3-factor model
<a href="#">ivol_hxz4_21d</a>	float64	hackathon_sample	Idiosyncratic volatility from the q-factor model
<a href="#">iskew_hxz4_21d</a>	float64	hackathon_sample	Idiosyncratic skewness from the q-factor model
<a href="#">rmax5_21d</a>	float64	hackathon_sample	Maximum daily return over the past 5 days.
<a href="#">rmax1_21d</a>	float64	hackathon_sample	Maximum single-day return over the past 21 days.
<a href="#">rvol_21d</a>	float64	hackathon_sample	Return volatility over the past 21 days.
<a href="#">rskew_21d</a>	float64	hackathon_sample	Return skewness over the past 21 days.
<a href="#">zero_trades_21d</a>	float64	hackathon_sample	Number of zero trades with turnover as tiebreaker (1 month)
<a href="#">dolvol_126d</a>	float64	hackathon_sample	Dollar trading volume
<a href="#">dolvol_var_126d</a>	float64	hackathon_sample	Coefficient of variation for dollar trading volume
<a href="#">turnover_126d</a>	float64	hackathon_sample	Share turnover
<a href="#">turnover_var_126d</a>	float64	hackathon_sample	Coefficient of variation for share turnover
<a href="#">zero_trades_126d</a>	float64	hackathon_sample	Number of zero trades with turnover as tiebreaker (6 months)
<a href="#">zero_trades_252d</a>	float64	hackathon_sample	Number of zero trades with turnover as tiebreaker (12 months)
<a href="#">ami_126d</a>	float64	hackathon_sample	Amihud Measure
<a href="#">ivol_capm_252d</a>	float64	hackathon_sample	Idiosyncratic volatility from the CAPM (252 days)
<a href="#">prc_highprc_252d</a>	float64	hackathon_sample	Ratio of current price to 252-day high price.
<a href="#">betadown_252d</a>	float64	hackathon_sample	Downside beta
<a href="#">bidaskhl_21d</a>	float64	hackathon_sample	The high-low bid-ask spread
<a href="#">corr_1260d</a>	float64	hackathon_sample	Market correlation
<a href="#">betabab_1260d</a>	float64	hackathon_sample	Frazzini-Pedersen market beta
<a href="#">rmax5_rvol_21d</a>	float64	hackathon_sample	Ratio of maximum return to volatility over the past 21 days.
<a href="#">age</a>	int64	hackathon_sample	Firm age
<a href="#">qmj</a>	float64	hackathon_sample	Quality minus junk (QMJ) factor, a measure of firm quality.
<a href="#">qmj_prof</a>	float64	hackathon_sample	Profitability aspect of the QMJ factor, including metrics like return on assets or net income margin.
<a href="#">qmj_growth</a>	float64	hackathon_sample	Growth-related aspect of the QMJ factor, indicating trends in revenue or earnings expansion.
<a href="#">qmj_safety</a>	float64	hackathon_sample	Safety-related aspect of the QMJ factor, focusing on financial stability, low leverage, and stable cash flows.
<a href="#">year</a>	int64	eps_prediction_data	Year corresponding to the observation date.
<a href="#">month</a>	int64	eps_prediction_data	Month corresponding to the observation date.
<a href="#">date</a>	int64	eps_prediction_data	Observation date in YYYYMMDD format, often used to track stock or portfolio changes over time.
<a href="#">permno</a>	int64	eps_prediction_data	Permanent identifier for stocks in the database, useful for tracking across time periods.
<a href="#">eps_actual</a>	float64	eps_prediction_data	Earnings per share realized in the period (EPS) .
<a href="#">Estimate</a>	float64	eps_prediction_data	Earnings per share estimation from the analyst (EPS) .
<a href="#">stock_exret</a>	float64	eps_prediction_data	Stock exchange return from risk free rate.
<a href="#">Price</a>	float64	eps_prediction_data	Share price.
<a href="#">rf</a>	float64	eps_prediction_data	Random forest predicion for eps