

Critiquing the Performance of Chosen Mutual Fund Firms in Large Cap Equity Investments Indexed in Nifty 100

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Abstract

Investment decision of an investor is depending on performance of a stock with risk associated with it, especially in case investment shares. In current scenario, investment in mutual fund is growing, basis reasons are Mutual fund having a portfolio of various securities and managed by team professionals, along with minimum investment. Investor must have basic knowledge of investment and financial market, additionally it can be purchased directly by online or offline with or without agent.

Besides these characteristics, Mutual industry also needs to perform according to the expectations of the investors. This paper is based on this, the main objective of this paper is to find out the performance of mutual fund specifically Equity Fund. Research type is Empirical in nature, sample techniques is Judgmental and convenience. Sample size is 10 listed top listed large cap fund (NIFTY 100 Total Return Index), data is collected from secondary source. Analytical tools are Sharpe's Index, and Treynor's methods used to analyses the performance of mutual fund of last 5 years (Direct Plan). The result of the analysis shows , all funds are overvalued in Sharpe's ratio and undervalued in Treynor's ratio. HDFC top 100 is rank first is both index and

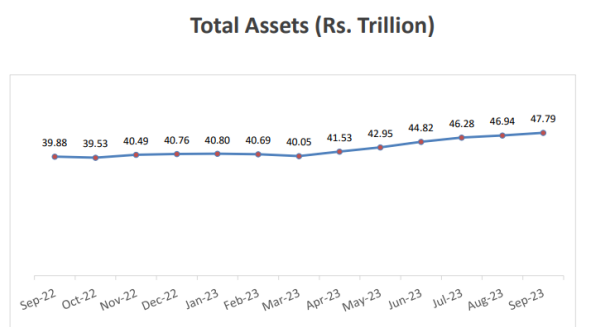
Keywords: Performance, Mutual Fund, Investment.

INTRDUCTION:

Habit of saving in Indian is old tradition, in early days, people from middle class specially women saved money by adding small amount daily, weekly or monthly basis. Mutual funds are now most preferable investment option for the small investors or the person's interest to take low risk (Debasish,2009). Mutual fund is corpus of fund, in which investors pool their money according to their investment behavior and risk appetite. Mutual Fund helps to need long term and short term goals of an individual. In international level, mutual fund was incorporate in the year 1868. In India, concept of mutual fund was initiated by UTI (Unit Trust of India) in the year 1964. UTI promoted mutual fund under the guide lines of RBI, in 1980's onward investment in UTI increased, as a new investment tool with fixed deposits and recurring deposits.

Further, in the year 1991 with new economic policy, popularly known as "LPG", Liberalization, Privatization and Globalization. Investment in mutual fund in one of the preferable alternatives among the investor. With new financial policies, SEBI was commenced its working in 1992. SEBI (Security Exchange Board of India), it was established with a movies to secure investor's fund from mal practicing of investment companies, promote investment in Capital Market and motivate the investors to invest in Capital Market.

The numbers of mutual fund companies were increase from 1993, and additionally Foreign Asset Management companies also participated in India. Within 10 years, there were 33 Mutual fund companies in India with total asset of Rs 1,21,805 cr. And UTI, was the leader of all companies with Rs 44541 cr of assets. (FUND, 2021).



Assets managed by the Indian mutual fund industry has increased from Rs. 39.88 trillion in September 2022 to Rs. 47.79 trillion in September 2023. That represents 19.84% increase in assets over September 2023

Fig 1: Source: Asset Management Fund of India.

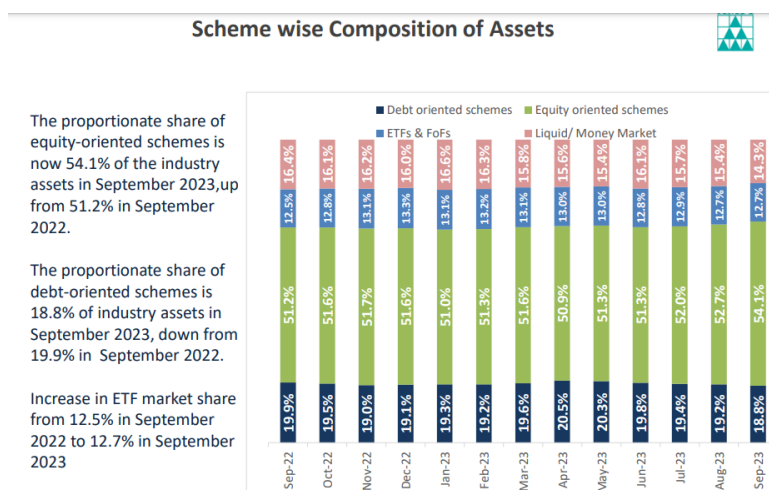


Fig 2: Source: Asset Management Fund of India

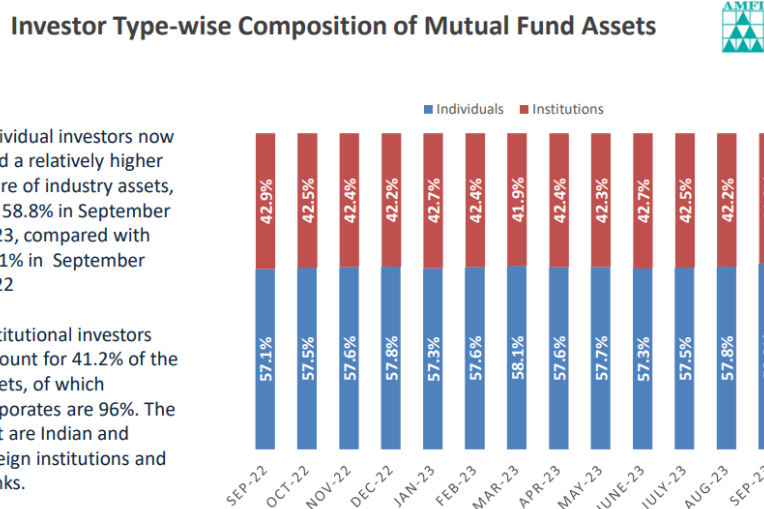


Fig 3: Source: Asset Management Fund of India

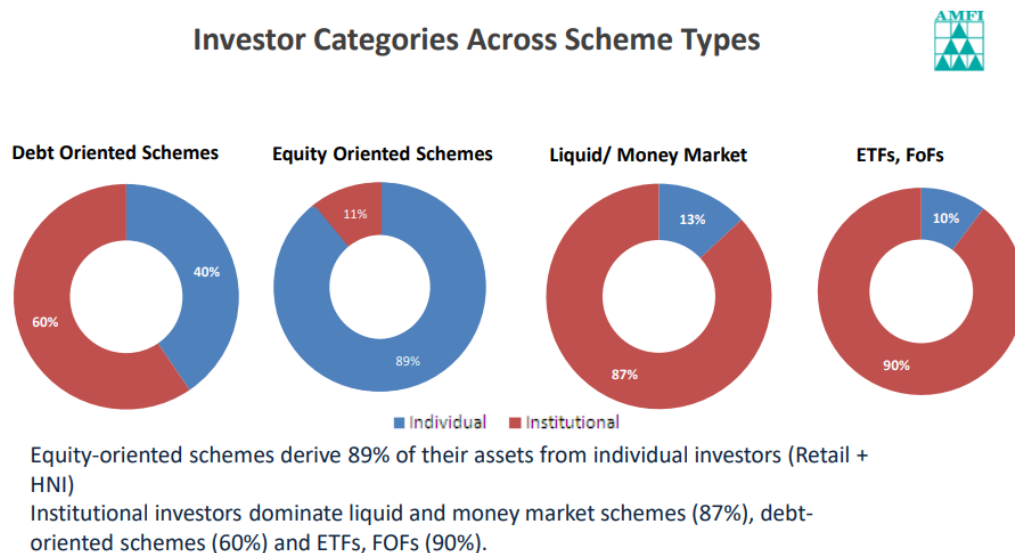


Fig 4: Source: Asset Management Fund of India

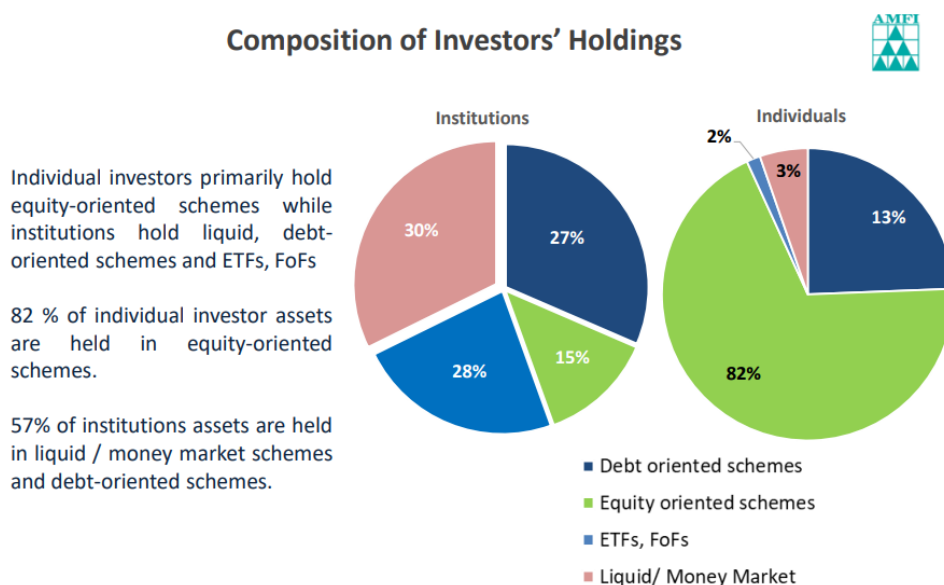


Fig 5: Source: Asset Management Fund of India

Review of Literature

Debasish(2009) has investigated the performance of mutual fund of selected companies which are equity based. The study covered 1996-97 to 2008-09 about 13 years of 17 companies, as the result of this research was mutual funds provides good return , if the investor invest the fund in systematic approach .Naliniparva (2004) studied the performance of Equity Link Saving Schemes of 13 schemes by using, Sharpe's , Treynor, Fama model to analysis the performance of mutual fund schemes. Tripathy (2017), in her research she studied the performances of using M square Model, Sortino ratio, Treynor-Mazuy and Henriksson-Merton models other than 3 basis tools. Her research concluded that, investor have to understand the risk by proper analysis of various parameters. Ravi & Basavarajappa (2018) studied mutual fund growth schemes and their performance. They found that investor keen to get maximum income by selection of best mutual fund.

Research Objectives

1. Examining Mutual Funds and Their Application in the Indian Financial Landscape.
2. Determining the Top-Ranked Companies within the S&P 100 Index.
3. Assessing Mutual Fund Performance through Portfolio Analysis.
4. Providing Insights on the Most Suitable Mutual Funds from the Specified Choices.

Research Methodology:

For this research, data is collected from AMFI website. The study is based on NIFTY 100 Total Return Index; ten mutual fund companies had been selected as purposive sample, for analysis (2018-19 to 2022-23), 5 years data has identified. For analysis of data, Sharpe and Tainyor Ratio.

William Sharpe gave the Sharpe ratio its name in 1966. Investors, in his opinion, are risk averse and constantly seek for portfolios with minimal risk and unpredictability (Bacon, 2008). William was suggested a model to analysis the performance of two or more portfolio. The model is

Equation 1

$$\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p}$$

where:

R_p = return of portfolio

R_f = risk-free rate

σ_p = standard deviation of the portfolio's excess return

To analyze the portfolio, value of Sharpe Ratio of each has ranked and compare with value of market index. If a portfolio is higher in ranked and greater than marker index it means over performed otherwise low performed portfolio. Risk free return is considering as per the guidelines of RBI which G- Sec(FBIL)

Treynor Ratio calculates a fund's return for every unit of risk it has taken, just as Sharpe Ratio does. It, however, employed fund beta as a suitable benchmark as a risk indicator (Ridley, 2004).

Equation 2

$$\text{Treynor Ratio} = \frac{r_p - r_f}{\beta_p}$$

where:

r_p = Portfolio return

r_f = Risk-free rate

β_p = Beta of the portfolio

Formula of Stadard Devation

$$\sigma = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{(n - 1)}}$$

Formula of Beta

$$\beta_p = \frac{Cov(r_p, r_b)}{Var(r_b)}$$

Analysis of Data

The first stage of analysis is selection of mutual fund schemes by taken into account of the following factors:

1. Fund must from Large Cap Equity.
2. Fund are indexed in NIFTY 100 Total Return Index

Selected Schemes of companies

Table 1

Scheme Name	Avg Return 5 Year (%) Direct
Aditya Birla Sun Life Frontline Equity Fund(ABSLF)	10.86
Baroda BNP Paribas Large Cap Fund(BBPLCF)	12.94
Edelweiss Large Cap Fund(ELCF)	13.05
Franklin India Bluechip Fund(FIBF)	10.00
Groww Large Cap Fund (GLCF)	9.34
HDFC Top 100 Fund(HDFC100)	12.08
HSBC Large Cap Fund(HSBC)	10.92
ICICI Prudential Bluechip Fund(ICICIPBF)	12.58
Invesco India Largecap Fund(IILF)	11.29
Kotak Bluechip Fund(KBF)	12.91

Table 1, shows list of fund which are indexed in NIFTY 100 Total Return Index and are under large cap fund. Study has considered average return of five years of 10 schemes. ELCF having highest average in five years 13.05 %, BBPLCF is 12.94%, Kotak Bluechip Fund(KBF) return in five years 12.91%. ICICI Prudential Bluechip Fund 12.58%, Invesco India Largecap Fund(IILF) 11.29%, HSBC Large Cap Fund(HSBC) 10.92 %, Franklin India Bluechip Fund(FIBF) 10% followed by Groww Large Cap Fund (GLCF) , 9.34% and Aditya Birla Sun Life Frontline Equity 10.86% respectively.

Table 2

PERFORMANCE ANALYSIS TABLE		
Scheme Name	Avg Return 5 Year (%) Direct	BETA(%)
Aditya Birla Sun Life Frontline Equity Fund(ABSLF)	10.86	0.94
Baroda BNP Paribas Large Cap Fund(BBPLCF)	12.94	0.94

Edelweiss Large Cap Fund(ELCF)	13.05	0.94
Franklin India Bluechip Fund(FIBF)	10.00	0.95
Groww Large Cap Fund (GLCF)	9.34	0.97
HDFC Top 100 Fund(HDFC100)	12.08	1
HSBC Large Cap Fund(HSBC)	10.92	1.01
ICICI Prudential Bluechip Fund(ICICIPBF)	12.58	0.9
Invesco India Largecap Fund(IILF)	11.29	0.94
Kotak Bluechip Fund(KBF)	12.91	0.93

Table 2, reflects standard deviation of each years, which is calculated by taken return from 2018-19 to 2022-23 Standard deviation is total risk shows by (σ) and sensivity of portfolio with market is denoted by Beta (β). High standard deviation with high beta means portfolio is risky and very sensitive. Aditya Birla Sun Life Frontline Equity Fund(ABSLF)'s standard deviation is 12.3 and beta is 0.94, Baroda BNP Paribas Large Cap Fund(BBPLCF) 's S.D is 12.32 with β is .94. Similarly, Edelweiss Large Cap Fund(ELCF) has 12.3 (Sigma) with β is 0.94,. Franklin India Bluechip Fund(FIBF) s σ is 13.11 and Beta is 0.95. Groww Large Cap Fund (GLCF)'s standard deviation is 12.96% beta is 0.97, UTI fund 's 0.92. HDFC Top 100 Fund(HDFC100) 12.78 sigma and systematic risk is 1, HSBC Large Cap Fund(HSBC) with 13.39% volatility,a risk is 1.01, ICICI Prudential Bluechip Fund(ICICIPBF) with 11.92 % SD and 0.9 Beta, Invesco India Largecap Fund(IILF) with 12.51% and 0.94 respectively, Kotak Bluechip Fund(KBF) with 12.2 % and 0.93.

Calculation of Sharpe's Index

Table 3

PERFORMANCE ANALYSIS TABLE				
MUTUAL FUND	5 YEAR RETURN(%)	STD DEVIATION (%)	BETA(%)	SHARPE'S INDEX
Aditya Birla Sun Life Frontline Equity Fund(ABSLF)	10.86	12.3	0.94	1.17
Baroda BNP Paribas Large Cap Fund(BBPLCF)	12.94	12.32	0.94	1.02
Edelweiss Large Cap Fund(ELCF)	13.05	12.3	0.94	1.03
Franklin India Bluechip Fund(FIBF)	10.00	13.11	0.95	1.12
Groww Large Cap Fund (GLCF)	9.34	12.96	0.97	0.79
HDFC Top 100 Fund(HDFC100)	12.08	12.78	1	1.43
HSBC Large Cap Fund(HSBC)	10.92	13.39	1.01	0.92
ICICI Prudential Bluechip Fund(ICICIPBF)	12.58	11.92	0.9	1.35
Invesco India Largecap Fund(IILF)	11.29	12.51	0.94	0.96
Kotak Bluechip Fund(KBF)	12.91	12.2	0.93	1.06

In table 3, Sharpe's Index has calculated by using equation 1. It must be noted that highest the ratio highest the performance.

Table 4

PERFORMANCE ANALYSIS TABLE					
MUTUAL FUND	5 YEAR RETURN(%)	STD DEVIATION (%)	BETA(%)	SHARPE'S INDEX	RANK
Aditya Birla Sun Life Frontline Equity Fund	10.86	12.3	0.94	1.17	3
Baroda BNP Paribas Large Cap Fund	12.94	12.32	0.94	1.02	6
Edelweiss Large Cap Fund	13.05	12.3	0.94	1.03	7
Franklin India Bluechip Fund	10.00	13.11	0.95	1.12	4
Groww Large Cap Fund	9.34	12.96	0.97	0.79	10
HDFC Top 100 Fund	12.08	12.78	1	1.43	1
HSBC Large Cap Fund	10.92	13.39	1.01	0.92	9
ICICI Prudential Bluechip Fund	12.58	11.92	0.9	1.35	2
Invesco India Largecap Fund	11.29	12.51	0.94	0.96	8
Kotak Bluechip Fund	12.91	12.2	0.93	1.06	5
NIFTY 100 Total Return Index	12.41	18.78	0.98	0.31	
Risk Free Rutun (G-Sec Par Yield (FBIL)	6.61				

In table 4, after calculation of Sharpe's index, ranking has given to the schemes according to the value of index Here HDFC Top 100 Fund has highest ratio of 1.43 and Groww Large Cap Fund (GLCF) is lowest ratio (0.79)

Calculation of Treynor's Index

Table 5

PERFORMANCE ANALYSIS TABLE				
MUTUAL FUND	5 YEAR RETURN(%)	STD DEVIATION (%)	BETA(%)	TREYNOR'S INDEX
Aditya Birla Sun Life Frontline Equity Fund	10.86	12.3	0.94	0.15
Baroda BNP Paribas Large Cap Fund	12.94	12.32	0.94	0.13
Edelweiss Large Cap Fund	13.05	12.3	0.94	0.14
Franklin India Bluechip Fund	10.00	13.11	0.95	0.15
Groww Large Cap Fund	9.34	12.96	0.97	0.1
HDFC Top 100 Fund	12.08	12.78	1	1.01
HSBC Large Cap Fund	10.92	13.39	1.01	0.12
ICICI Prudential Bluechip Fund	12.58	11.92	0.9	0.18
Invesco India Largecap Fund	11.29	12.51	0.94	0.13
Kotak Bluechip Fund	12.91	12.2	0.93	0.14

NIFTY 100 Total Return Index	12.41	18.78	0.98	5.92
Risk Free Rutun (G-Sec Par Yield (FBIL)	6.61			

Table 6

PERFORMANCE ANALYSIS TABLE					
MUTUAL FUND	5 YEAR RETURN(%)	STD DEVIATION (%)	BETA(%)	TREYNOR'S INDEX	RANK
Aditya Birla Sun Life Frontline Equity Fund	10.86	12.3	0.94	0.15	3
Baroda BNP Paribas Large Cap Fund	12.94	12.32	0.94	0.13	5
Edelweiss Large Cap Fund	13.05	12.3	0.94	0.14	4
Franklin India Bluechip Fund	10.00	13.11	0.95	0.15	3
Groww Large Cap Fund	9.34	12.96	0.97	0.1	7
HDFC Top 100 Fund	12.08	12.78	1	1.01	1
HSBC Large Cap Fund	10.92	13.39	1.01	0.12	6
ICICI Prudential Bluechip Fund	12.58	11.92	0.9	0.18	2
Invesco India Largecap Fund	11.29	12.51	0.94	0.13	5
Kotak Bluechip Fund	12.91	12.2	0.93	0.14	4
NIFTY 100 Total Return Index	12.41	18.78	0.98	5.92	
Risk Free Rutun (G-Sec Par Yield (FBIL)	6.61				

Similar to Sharpe 's Index, in table 5 and table 6 , Treynor's Index has calculated than according the value, rank has been given to the funds. HDFC Top 100 Fund ranked first with 1.01 value. ICICI Prudential Bluechip Fund in second position. Third position shared by Aditya Birla Sun Life Frontline Equity Fund and Franklin India Bluechip Fund. Similarly forth rank combined of Edelweiss Large Cap Fund and Kotak Bluechip Fund, Invesco India Largecap Fund and Baroda BNP Paribas Large Cap Fund is in 5th position. HSBC Large Cap Fund at 6th and Groww Large Cap Fund at 7th.

Comparative Study

Table 7

PERFORMANCE ANALYSIS TABLE				
MUTUAL FUND	SHARPE'S INDEX	RANK	TREYNOR'S INDEX	RANK
Aditya Birla Sun Life Frontline Equity Fund	1.17	3	0.15	3

Baroda BNP Paribas Large Cap Fund	1.02	6	0.13	5
Edelweiss Large Cap Fund	1.03	7	0.14	4
Franklin India Bluechip Fund	1.12	4	0.15	3
Groww Large Cap Fund	0.79	10	0.1	7
HDFC Top 100 Fund	1.43	1	1.01	1
HSBC Large Cap Fund	0.92	9	0.12	6
ICICI Prudential Bluechip Fund	1.35	2	0.18	2
Invesco India Largecap Fund	0.96	8	0.13	5
Kotak Bluechip Fund	1.06	5	0.14	4
NIFTY 100 Total Return Index	0.31		5.92	
Risk Free Rutun (G-Sec Par Yield (FBIL)				

Table 7, is comparable study of Sharpe's Index and Trenyor's Index, it shown that HDFC Top 100 Fund is common ranked in both indexed and Groww Large Cap Fund is at last .

Finding

Performance of mutual funds has judged by its return and risk. Risk and return tradeoff is significant factor for all investment strategies. In this research, 9 schemes are observed related to large equity cap. Sharpe and Trenyor Index method has used to find out performance of fund. In final stage of analysis, result of both index are compare with result of market index. The below table 8, shows the results.

Table 8

PERFORMANCE ANALYSIS TABLE						
MUTUAL FUND	SHARPE'S INDEX	TREYNOR'S INDEX	VALUATION OF FUNDS AFTER COMPARE SHARPE'S INDEX WITH MARKET INDEX		VALUATION OF FUNDS AFTER COMPARE TREYNOR'S INDEX WITH MARKET INDEX	
COMPANIES			OVERVALUED	UNDERVALUED	OVERVALUED	UNDERVALUED
Aditya Birla Sun Life Frontline Equity Fund	1.17	0.15	YES			YES
Baroda BNP Paribas Large Cap Fund	1.02	0.13	YES			YES
Edelweiss Large Cap Fund	1.03	0.14	YES			YES
Franklin India Bluechip Fund	1.12	0.15	YES			YES
Groww Large Cap Fund	0.79	0.1	YES			YES
HDFC Top 100 Fund	1.43	1.01	YES			YES
HSBC Large Cap Fund	0.92	0.12	YES			YES
ICICI Prudential Bluechip Fund	1.35	0.18	YES			YES
Invesco India Largecap Fund	0.96	0.13	YES			YES
Kotak Bluechip Fund	1.06	0.14	YES			YES
NIFTY 100 Total Return Index	0.31	5.92				
Risk Free Rutun (G-Sec Par Yield (FBIL)						

The table shows, all funds are over performed in Sharpe's ratio and under performed as per Trenor's Indexed.

Conclusion:

Mutual fund is one of the best assets for financial investment. There are some many schemes in a single mutual fund. It is not necessary, that all mutual fund schemes are profitable, return of schemes are also depends on their portfolio. In this study, it clear that only one fund is performing out of nine. Performance of fund can't judge by it return or risk there are other various indicator for performance evaluation.

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