**TASK 6 PART 1** REPORT

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Investor A | Investor B | Investor C | Investor D | Investor E | Investor F |
| Stocks in the portfolio | HDFC | ONGC | SpiceJet | HDFC and ONGC | ONGC and SpiceJet | HDFC and SpiceJet |
| Expected Return | 0.000398669 | 0.001623683 | -0.00175786 | 0.758667348 | 0.04228193 | 2.035007373 |
| Variance on the return | 0.000263571 | 0.000543733 | 0.000860743 | 647.2916361 | 18.2360443 | 0.000477717 |

Summary of the portfolio of investors A, B, C, D, E, AND F:

Three of the investors (A, B, C) have single-asset portfolios and the other three investors (D, E, F) have two-asset portfolios.

It is visible from the data that investor F has the highest expected return and the lowest variance on the return (except A).

Investor D has a higher expected return than all others except F, but the variance on the return is high.

Investor E has a lower expected return than D but the variance on the return is also lower.

Investor C is expected to have a loss. Both expected return and variance on the return are higher for investor B than investor A.

All the investors D, E and F have higher expected returns than investors A, B, and C.

As represented by the expected returns, it can be concluded that a single-asset portfolio has lower returns compared to a two-asset portfolio. Also investing in a single stock is riskier than investing in two or more risks. Also, the return per risk is also greater for two-asset portfolios than single-asset portfolios.

Investor F has clearly benefitted from diversification of his portfolio as we can infer from the data that he has the highest expected return with the lowest variance. Thus, it is safe to conclude that diversified portfolios have reduced risk and higher long-term returns than single-asset portfolios.

**TASK 6 PART 2**

All the tasks have been single-handedly done by me.