2.9 Volatility

Compute close-close volatility using the following data:

Day	Closing Price	Dividend
0	3.27	0
1	3.67	0
2	2.85	0
3	3.42	0
4	3.78	0.03
5	3.60	0
6	3.20	0
7	3.13	0
8	3.44	0
9	3.62	0
10	3.05	0
11	3.34	0

SOLUTION:

Day	Returns	ln(Returns)
1	1.1223	0.1154
2	0.7766	-0.2529
3	1.2000	0.1823
4	1.1140	0.1080
5	0.9524	-0.0488
6	0.8889	-0.1178
7	0.9781	-0.0221
8	1.0990	0.0944
9	1.0523	0.0510
10	0.8425	-0.1713
11	1.0951	0.0908

Daily volatility = standard deviation of ln(Returns) = 0.1307;

Annualized volatility (multiply by $\sqrt{365}$) = 2.4973;