

```
In [38]: runfile('E:/GitWorkSpace/v-ratio-momentum-and-ladder/portfolio.py', wdir='E:/
GitWorkSpace/v-ratio-momentum-and-ladder')
```

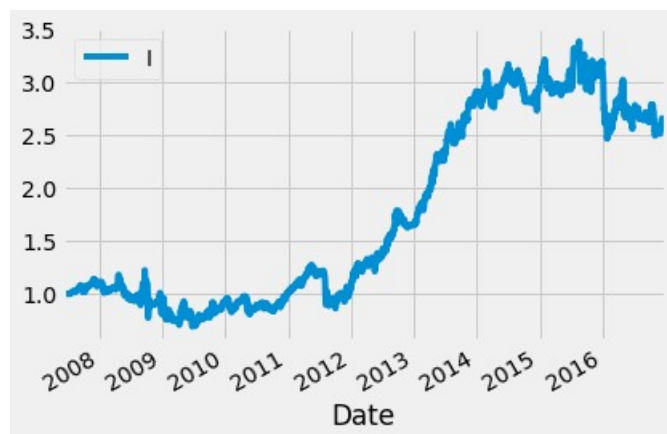
```
Reloaded modules: WhiteRealityCheckFor1, computation_helper, data_helper,
rotational_momentum
```

```
requested data history already exists!
```

```
===== (10, '4W-FRI-100%', 1, 1, 1, 1, -1) =====
```

```
E:\GitWorkSpace\v-ratio-momentum-and-ladder\computation_helper.py:278: RuntimeWarning:
invalid value encountered in double_scalars
```

```
vratio = t/(lag*b);
```



```
TotaAnnReturn = 16.117827
```

```
CAGR = 9.890000
```

```
Sharpe Ratio = 0.496000
```

```
Volatility= 0.275000
```

```
number of records for the series after dropping na: 1017
```

```
average return 0.001407
```

```
[-0.00269878 0.00273737]
```

```
Do not reject Ho = The population distribution of rule returns has an expected value of zero
or less (because p_value is not small enough)
```

```
p_value:
```

```
0.15488000000000002
```

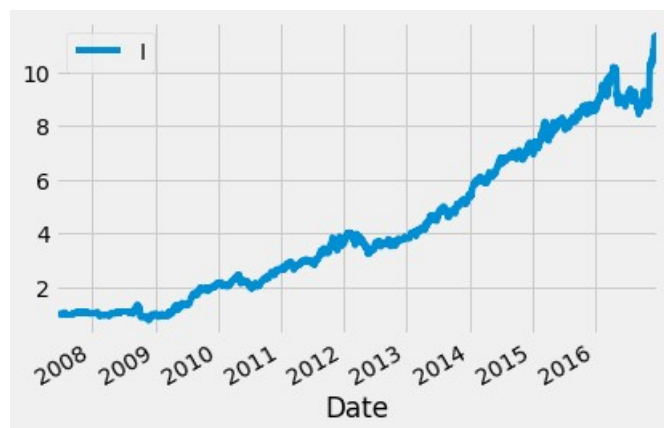
```
===== (10, '2W-FRI-50%', 1, 1, 1, 1, -1) =====
```

```
E:\GitWorkSpace\v-ratio-momentum-and-ladder\computation_helper.py:278: RuntimeWarning:
invalid value encountered in double_scalars
```

```
vratio = t/(lag*b);
```

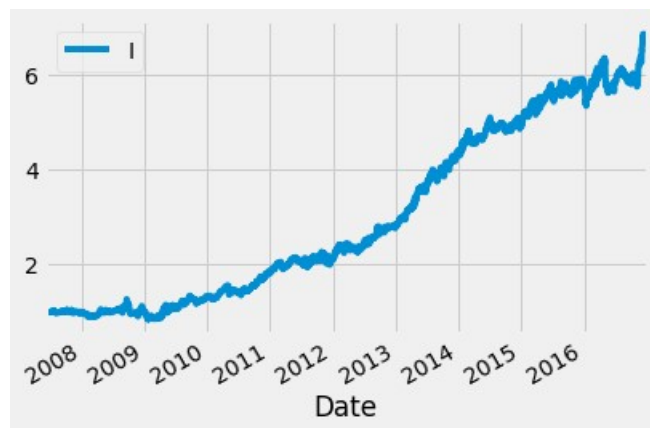


TotaAnnReturn = 25.639200
 CAGR = 13.320000
 Sharpe Ratio = 0.657000
 Volatility= 0.244000
 number of records for the series after dropping na: 1017
 average return 0.001223
 [-0.00264866 0.00267349]
 Do not reject Ho = The population distribution of rule returns has an expected value of zero or less (because p_value is not small enough)
 p_value:
 0.18413999999999997



TotaAnnReturn = 104.838965
 CAGR = 27.320000
 Sharpe Ratio = 1.112000
 Volatility= 0.256000
 number of records for the series after dropping na: 1017
 average return 0.003888
 [-0.00270209 0.00280343]
 Reject Ho = The population distribution of rule returns has an expected value of zero or less (because p_value is small enough)
 p_value:
 0.00339999999999999586

=====Overall=====



TotaAnnReturn = 59.089921
 CAGR = 21.030000
 Sharpe Ratio = 1.030000
 Volatility= 0.216000
 number of records for the series after dropping na: 1017

```

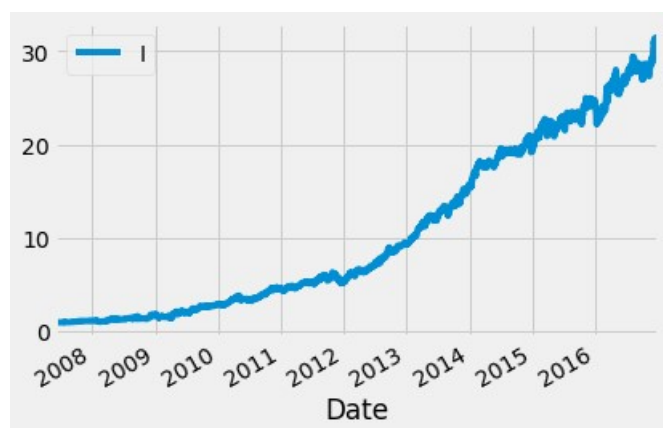
average return 0.002556
[-0.0022313  0.00226072]
Reject Ho = The population distribution of rule returns has an expected value of zero or
less (because p_value is small enough)
p_value:
0.013360000000000039

```

```

===== (10, '1W-FRI-25%', 1, 1, 1, 1, -1) =====
E:\GitWorkSpace\v-ratio-momentum-and-ladder\computation_helper.py:278: RuntimeWarning:
invalid value encountered in double_scalars
  vratio = t/(lag*b);

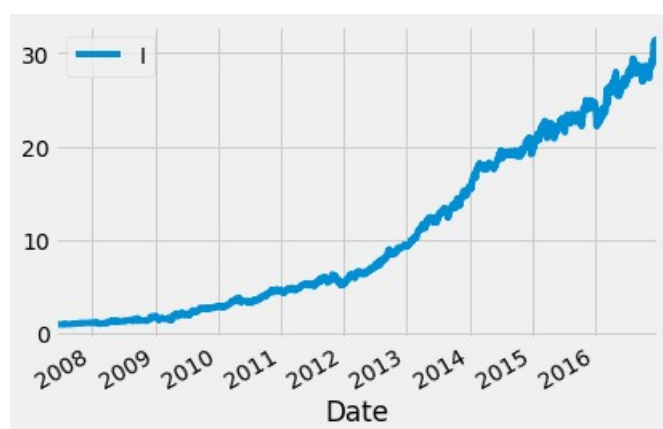
```



```

TotaAnnReturn = 309.004173
CAGR = 40.990000
Sharpe Ratio = 1.514000
Volatility= 0.259000
number of records for the series after dropping na: 1017
average return 0.004328
[-0.00279267  0.00286107]
Reject Ho = The population distribution of rule returns has an expected value of zero or
less (because p_value is small enough)
p_value:
0.0014600000000000168

```



```

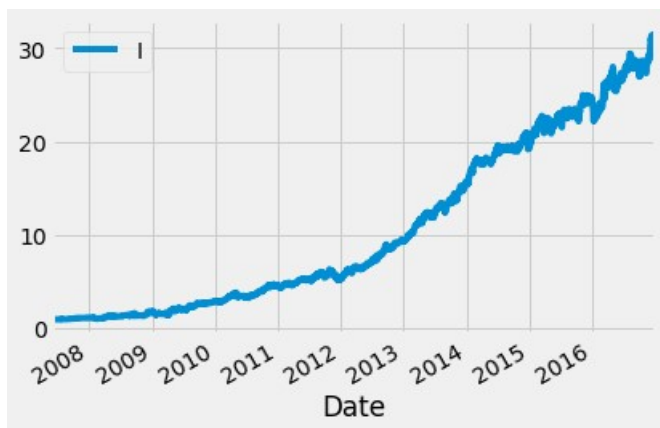
TotaAnnReturn = 309.004173
CAGR = 40.990000
Sharpe Ratio = 1.514000
Volatility= 0.259000
number of records for the series after dropping na: 1017
average return 0.004328
[-0.00276118  0.00286054]

```

Reject Ho = The population distribution of rule returns has an expected value of zero or less (because p_value is small enough)

p_value:

0.0012199999999999989



TotaAnnReturn = 309.004173

CAGR = 40.990000

Sharpe Ratio = 1.514000

Volatility= 0.259000

number of records for the series after dropping na: 1017

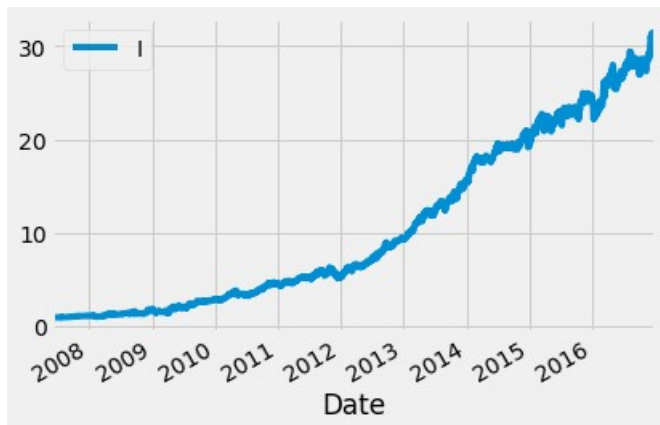
average return 0.004328

[-0.00280793 0.00282065]

Reject Ho = The population distribution of rule returns has an expected value of zero or less (because p_value is small enough)

p_value:

0.00148000000000000368



TotaAnnReturn = 309.004173

CAGR = 40.990000

Sharpe Ratio = 1.514000

Volatility= 0.259000

number of records for the series after dropping na: 1017

average return 0.004328

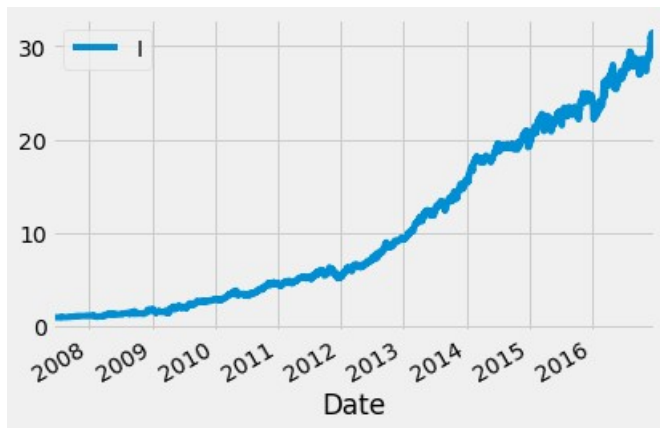
[-0.0027866 0.00280915]

Reject Ho = The population distribution of rule returns has an expected value of zero or less (because p_value is small enough)

p_value:

0.00131999999999999878

=====Overall=====



TotaAnnReturn = 309.004173

CAGR = 40.990000

Sharpe Ratio = 1.514000

Volatility= 0.259000

number of records for the series after dropping na: 1017

average return 0.004328

[-0.00277822 0.00286435]

Reject Ho = The population distribution of rule returns has an expected value of zero or less (because p_value is small enough)

p_value:

0.0013999999999999568

In [39]: