In [1]:

```
import pandas as pd
```

In [9]:

```
import numpy as np
```

In [2]:

```
df = pd.read_table('integrated.tsv', sep='\t')
```

In [5]:

```
NAA_GSEs = ['GSE3350', 'GSE3350(1', 'GSE3350(2', 'GSE42896']
IAA_GSEs = ['GSE35580', 'GSE35580(1', 'GSE35580(2', 'GSE35580(3', 'GSE35580(4',
'GSE7432', 'GSE71737']
# auxin concentration: High -> Low
```

In [6]:

```
df[df['p-value'] < 0.01][['Probe Set ID'] + NAA_GSEs + IAA_GSEs].to_csv('toR_Pva
lue_001.tsv', sep='\t')
```

In [20]:

```
df['std'] = 0
```

In [17]:

```
df.loc[i][NAA_GSEs + IAA_GSEs]
```

Out[17]:

```
GSE3350           -0.476
GSE3350(1       0.454559
GSE3350(2           0.11
GSE42896      0.00646512
GSE35580         1.37228
GSE35580(1     -0.426163
GSE35580(2      0.974272
GSE35580(3     0.0923416
GSE35580(4      -1.32642
GSE7432        0.0369477
GSE71737        0.644288
Name: 22809, dtype: object
```

In [22]:

```
for i in df.index:
    df.loc[i, 'std'] = np.std(df.loc[i][NAA_GSEs + IAA_GSEs])
```

In [27]:

```
high_std = df[df['std'] > 0.928539]
```