

```
{'mellow': 1, 'sad': 2, 'angry': 3, 'happy': 0}
{'classical': 9, 'house': 2, 'jazz': 7, 'metal': 3, 'pop': 1, 'dubstep': 6, 'rap': 8, 'rock': 0, 'blues': 5,
'folk': 4}
Running
```

==== Transition Matrix =====

Transition Matrix

```
[0.2830188679245283, 0.4716981132075472, 0.12971698113207547, 0.11556603773584906]

[0.2335907335907336, 0.3803088803088803, 0.29343629343629346, 0.09266409266409266]

[0.1035031847133758, 0.09713375796178345, 0.3678343949044586, 0.4315286624203822]

[0.18870967741935485, 0.09838709677419355, 0.3064516129032258, 0.4064516129032258]
```

==== Emission Matrix =====

Emission Matrix

```
[0.14858490566037735, 0.22877358490566038, 0.15330188679245282, 0.1179245283018868,
0.04716981132075472, 0.05188679245283019, 0.02830188679245283,
0.12971698113207547, 0.09198113207547169, 0.0023584905660377358]

[0.10597302504816955, 0.009633911368015413, 0.019267822736030827,
0.030828516377649325, 0.16955684007707128, 0.046242774566473986,
0.14065510597302505, 0.23892100192678228, 0.13872832369942195, 0.1001926782273603]

[0.11942675159235669, 0.042993630573248405, 0.06528662420382166,
0.09076433121019108, 0.1767515923566879, 0.20222929936305734, 0.04617834394904458,
0.050955414012738856, 0.07802547770700637, 0.12738853503184713]

[0.1693548387096774, 0.03870967741935484, 0.14677419354838708, 0.18225806451612903,
0.04838709677419355, 0.06290322580645161, 0.09032258064516129,
0.025806451612903226, 0.2161290322580645, 0.01935483870967742]
```