

Jiahui Tang

2.4. Movie Rating Data (10 points)

Develop a Spark version of the job to show movies with an average rating in the ranges:

Range 1: 1 or lower

Range 2: 2 or lower (but higher than 1)

Range 3: 3 or lower (but higher than 2)

Range 4: 4 or lower (but higher than 3)

Range 5: 5 or lower (but higher than 4)

You can use the `ml-latest-small.zip` file from Problem 1.4. You may need to use **DataFrames** to simplify the processing of the data.

```
$ spark-submit P24_spark.py
```

Submission

- `P24_spark.py`: Spark script
- `P24.pdf`: The command line that you used to execute the job and any information required to reproduce the execution

Command Used:

```
spark-submit P24_spark.py
```

Output:

```
Range,list_of_movieId
5,"[296, 3606, 48738, 4821, 1572, 26082, 47092, 100553, 58559, 800,
3368, 77291, 3281, 926, 1280, 1361, 2917, 3200, 62049, 49280, 7208,
1953, 50068, 6380, 71462, 69844, 6732, 68099, 2550, 1903, 140761,
307, 26131, 475, 3167, 7574, 3902, 79469, 112577, 62331, 95567,
6033, 5071, 2644, 581, 106441, 77658, 8183, 3656, 5498, 90576, 6883,
1349, 120821, 8699, 232, 3089, 1305, 73587, 4789, 7256, 106696,
6612, 1207, 1304, 3983, 2545, 5799, 80026, 2762, 4437, 5732, 6121,
86548, 86487, 66665, 39416, 72356, 60333, 5059, 5101, 39427, 1259,
65037, 58425, 1192, 98491, 95115, 5475, 72647, 102217, 96075,
107083, 2648, 112175, 26150, 6869, 8511, 136447, 4189, 89870,
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140755, 534, 59018, 50641, 48501, 7720, 79136, 4626, 92259, 73,
6116, 7889, 32797, 50011, 64501, 356, 308, 6375, 27728, 42191, 4584,
64114, 1692, 541, 1931, 95475, 79132, 27646, 30, 161944, 140265,
75990, 1136, 6807, 2305, 3814, 6405, 153584, 88125, 5017, 5062,
2562, 3580, 2329, 1300, 73808, 5440, 7919, 903, 162, 3468, 97957,
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8126, 26729, 106782, 1227, 25947, 7002, 58520, 107649, 50245,
130522, 951, 7099, 40412, 59273, 787, 1563, 3095, 28, 26712, 184,
67295, 148372, 4565, 1283, 7827, 3171, 58649, 1213, 3504, 1941,
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27022, 26578, 8979, 27826, 47, 79357, 3627, 5662, 2131, 32525, 3947,
26094, 3153, 57243, 4466, 7087, 565, 116897, 928, 4570, 3653, 5607,
31433, 118890, 7069, 3310, 54734, 390, 527, 1278, 4878, 1228,
146656, 4151, 142240, 953, 1260, 8580, 850, 34435, 3909, 1193,
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