Lab 6 outputs:

```
/usr/lib/jvm/java-8-oracle/bin/java ...
Top 20 frequent words with rank, word and frequency respectively:
[[1, the, 26823], [2, and, 24070], [3, i, 20107], [4, to, 18556], [5, of, 16013], [6, you, 13845], [7, a, 13699], [8, my, 12268], [9, that, 10753],
```

```
[10, in, 10532], [11, is, 9147], [12, not, 8456], [13, me, 7758], [14, it, 7747], [15, for, 7574], [16, with, 7148], [17, be, 6842], [18, your, 6749],
```

```
[19, this, 6590], [20, his, 6530]]
```

```
Probability of words:
Probability of "THE" 0.032961927
Probability of "BECOME" 1.76957E-4
Probability of "BRAVE" 1.929323E-4
Probability of "TREASON" 1.130559E-4

Part B
P[court|the] 0.003914551
P[word|his] 0.002143951
P[qualities|rare] 0.017857144
P[men|young] 0.019138755

Chain rule- dependent case:
Probability of P[have, sent] 0.004708256
Probability of P[will, look, upon]  9.328634E-7
Probability of P[i, am, no, baby] 0.0
Probability of P[wherefore, art, thou, romeo] 0.0

Chain rule- independent case:
Probability of P[have, sent] 2.4068177E-6
Probability of P[will, look, upon]  1.3201848E-8
Probability of P[i, am, no, baby] 5.1997512E-12
Probability of P[wherefore, art, thou, romeo] 1.7132059E-13

Process finished with exit code 0
```