===> First phase
==> No preprocessing
=> Multinomial Bayes naive classifier
Score 1.: 86.75% Score 2.: 87.75% Score 3.: 88.41% Score 4.: 85.76% Score 5.: 86.42%
Score 6.: 87.09% Score 7.: 88.74% Score 8.: 87.09% Score 9.: 85.43% Score 10.: 84.77%
Average: 86.82%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 79.80% Score 2.: 82.45% Score 3.: 80.46% Score 4.: 79.80% Score 5.: 79.47%
Score 6.: 78.48% Score 7.: 80.13% Score 8.: 81.13% Score 9.: 81.13% Score 10.: 82.78%
Average: 80.56%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 87.75% Score(L1) 2.: 90.40% Score(L1) 3.: 91.06% Score(L1) 4.: 89.40% Score(L1) 5.: 89.74%
Score(L1) 6.: 87.75% Score(L1) 7.: 88.74% Score(L1) 8.: 89.40% Score(L1) 9.: 89.07% Score(L1) 10.: 89.07%
Average: 89.24%

Score(L2) 1.: 89.07% Score(L2) 2.: 89.74% Score(L2) 3.: 92.38% Score(L2) 4.: 87.09% Score(L2) 5.: 89.07%
Score(L2) 6.: 91.72% Score(L2) 7.: 88.74% Score(L2) 8.: 88.08% Score(L2) 9.: 90.73% Score(L2) 10.: 91.39%
Average: 89.80%

> Results with optimized C parameter
Optimized C: 0.916
Score(L2) 1.: 92.72% Score(L2) 2.: 91.72% Score(L2) 3.: 91.06% Score(L2) 4.: 90.40% Score(L2) 5.: 90.07%
Score(L2) 6.: 88.74% Score(L2) 7.: 92.05% Score(L2) 8.: 88.08% Score(L2) 9.: 88.08% Score(L2) 10.: 92.05%
Average: 90.50%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 86.42% Score(L1) 2.: 88.41% Score(L1) 3.: 84.44% Score(L1) 4.: 88.08% Score(L1) 5.: 89.07%
Score(L1) 6.: 88.08% Score(L1) 7.: 85.76% Score(L1) 8.: 85.76% Score(L1) 9.: 89.74% Score(L1) 10.: 89.74%
Average: 87.55%

Score(L2) 1.: 90.40% Score(L2) 2.: 89.40% Score(L2) 3.: 90.73% Score(L2) 4.: 88.74% Score(L2) 5.: 86.42%
Score(L2) 6.: 89.07% Score(L2) 7.: 87.42% Score(L2) 8.: 87.75% Score(L2) 9.: 89.07% Score(L2) 10.: 89.74%
Average: 88.87%

> Results with optimized C parameter
Optimized C: 0.892
Score(L2) 1.: 89.74% Score(L2) 2.: 90.73% Score(L2) 3.: 86.42% Score(L2) 4.: 84.44% Score(L2) 5.: 90.73%
Score(L2) 6.: 88.74% Score(L2) 7.: 88.08% Score(L2) 8.: 89.07% Score(L2) 9.: 86.09% Score(L2) 10.: 85.10%
Average: 87.91%

==> Lower casing
=> Multinomial Bayes naive classifier
Score 1.: 88.41% Score 2.: 83.44% Score 3.: 90.40% Score 4.: 85.43% Score 5.: 87.09%
Score 6.: 86.42% Score 7.: 89.40% Score 8.: 88.41% Score 9.: 84.11% Score 10.: 87.42%

Average: 87.05%

=> Bernoulli multinomial Bayes naive classifier

Score 1.: 80.79% Score 2.: 83.44% Score 3.: 77.48% Score 4.: 78.48% Score 5.: 79.80%
Score 6.: 81.46% Score 7.: 78.15% Score 8.: 77.15% Score 9.: 83.11% Score 10.: 81.79%
Average: 80.17%

=> Support vector classifier

> L1/L2 comparing
Score(L1) 1.: 84.44% Score(L1) 2.: 88.08% Score(L1) 3.: 87.09% Score(L1) 4.: 87.75% Score(L1) 5.: 86.75%
Score(L1) 6.: 87.42% Score(L1) 7.: 90.73% Score(L1) 8.: 87.09% Score(L1) 9.: 88.74% Score(L1) 10.: 87.75%
Average: 87.58%

Score(L2) 1.: 89.40% Score(L2) 2.: 88.41% Score(L2) 3.: 86.75% Score(L2) 4.: 85.76% Score(L2) 5.: 89.74%
Score(L2) 6.: 89.40% Score(L2) 7.: 92.05% Score(L2) 8.: 90.40% Score(L2) 9.: 87.09% Score(L2) 10.: 91.06%
Average: 89.01%

> Results with optimized C parameter
Optimized C: 0.924
Score(L2) 1.: 90.73% Score(L2) 2.: 89.40% Score(L2) 3.: 91.39% Score(L2) 4.: 88.41% Score(L2) 5.: 90.73%
Score(L2) 6.: 93.71% Score(L2) 7.: 89.74% Score(L2) 8.: 87.09% Score(L2) 9.: 93.05% Score(L2) 10.: 90.07%
Average: 90.43%

=> Logistic regression

> L1/L2 comparing
Score(L1) 1.: 89.40% Score(L1) 2.: 87.09% Score(L1) 3.: 85.76% Score(L1) 4.: 87.75% Score(L1) 5.: 87.09%
Score(L1) 6.: 86.75% Score(L1) 7.: 88.74% Score(L1) 8.: 88.41% Score(L1) 9.: 89.74% Score(L1) 10.: 89.40%
Average: 88.01%

Score(L2) 1.: 89.40% Score(L2) 2.: 90.07% Score(L2) 3.: 88.74% Score(L2) 4.: 89.74% Score(L2) 5.: 86.42%
Score(L2) 6.: 92.38% Score(L2) 7.: 90.07% Score(L2) 8.: 89.40% Score(L2) 9.: 86.09% Score(L2) 10.: 87.42%
Average: 88.97%

> Results with optimized C parameter
Optimized C: 0.912
Score(L2) 1.: 90.07% Score(L2) 2.: 90.40% Score(L2) 3.: 89.74% Score(L2) 4.: 86.42% Score(L2) 5.: 87.09%
Score(L2) 6.: 87.75% Score(L2) 7.: 89.74% Score(L2) 8.: 88.08% Score(L2) 9.: 85.76% Score(L2) 10.: 87.42%
Average: 88.25%

==> Term Frequency
=> Multinomial Bayes naive classifier

Score 1.: 85.10% Score 2.: 83.44% Score 3.: 81.13% Score 4.: 81.46% Score 5.: 80.79%
Score 6.: 82.78% Score 7.: 80.46% Score 8.: 83.11% Score 9.: 79.14% Score 10.: 84.11%
Average: 82.15%

=> Bernoulli multinomial Bayes naive classifier

Score 1.: 80.13% Score 2.: 79.47% Score 3.: 76.82% Score 4.: 77.15% Score 5.: 81.46%
Score 6.: 82.12% Score 7.: 79.80% Score 8.: 78.81% Score 9.: 79.14% Score 10.: 81.79%

Average: 79.67%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 86.42% Score(L1) 2.: 89.74% Score(L1) 3.: 86.42% Score(L1) 4.: 86.42% Score(L1) 5.: 86.75%
Score(L1) 6.: 90.73% Score(L1) 7.: 89.40% Score(L1) 8.: 89.74% Score(L1) 9.: 88.41% Score(L1) 10.: 90.40%
Average: 88.44%

Score(L2) 1.: 89.07% Score(L2) 2.: 90.07% Score(L2) 3.: 89.74% Score(L2) 4.: 91.72% Score(L2) 5.: 88.74%
Score(L2) 6.: 93.38% Score(L2) 7.: 89.07% Score(L2) 8.: 91.72% Score(L2) 9.: 87.75% Score(L2) 10.: 90.07%
Average: 90.13%

> Results with optimized C parameter
Optimized C: 0.898
Score(L2) 1.: 87.42% Score(L2) 2.: 90.07% Score(L2) 3.: 88.08% Score(L2) 4.: 91.06% Score(L2) 5.: 88.74%
Score(L2) 6.: 87.42% Score(L2) 7.: 86.42% Score(L2) 8.: 90.07% Score(L2) 9.: 90.40% Score(L2) 10.: 89.40%
Average: 88.91%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 80.46% Score(L1) 2.: 80.13% Score(L1) 3.: 84.44% Score(L1) 4.: 81.79% Score(L1) 5.: 87.75%
Score(L1) 6.: 86.09% Score(L1) 7.: 86.09% Score(L1) 8.: 86.42% Score(L1) 9.: 83.44% Score(L1) 10.: 83.44%
Average: 84.01%

Score(L2) 1.: 84.11% Score(L2) 2.: 84.11% Score(L2) 3.: 87.09% Score(L2) 4.: 87.75% Score(L2) 5.: 83.44%
Score(L2) 6.: 87.75% Score(L2) 7.: 89.40% Score(L2) 8.: 82.45% Score(L2) 9.: 86.75% Score(L2) 10.: 84.11%
Average: 85.70%

> Results with optimized C parameter
Optimized C: 1.033
Score(L2) 1.: 87.42% Score(L2) 2.: 85.76% Score(L2) 3.: 86.75% Score(L2) 4.: 87.09% Score(L2) 5.: 88.08%
Score(L2) 6.: 86.09% Score(L2) 7.: 84.77% Score(L2) 8.: 86.09% Score(L2) 9.: 87.09% Score(L2) 10.: 86.42%
Average: 86.56%

==> Inverse Document Frequency
=> Multinomial Bayes naive classifier
Score 1.: 88.08% Score 2.: 88.08% Score 3.: 88.74% Score 4.: 86.09% Score 5.: 87.09%
Score 6.: 86.75% Score 7.: 89.40% Score 8.: 86.42% Score 9.: 86.75% Score 10.: 89.74%
Average: 87.72%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 81.79% Score 2.: 83.11% Score 3.: 82.12% Score 4.: 78.81% Score 5.: 82.45%
Score 6.: 81.46% Score 7.: 79.80% Score 8.: 79.14% Score 9.: 81.79% Score 10.: 82.78%
Average: 81.32%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 90.07% Score(L1) 2.: 89.74% Score(L1) 3.: 90.73% Score(L1) 4.: 88.74% Score(L1) 5.: 90.40%

Score(L1) 6.: 89.40% Score(L1) 7.: 87.75% Score(L1) 8.: 87.42% Score(L1) 9.: 89.40% Score(L1) 10.: 91.39%
Average: 89.50%

Score(L2) 1.: 90.40% Score(L2) 2.: 91.39% Score(L2) 3.: 88.41% Score(L2) 4.: 89.07% Score(L2) 5.: 89.40%
Score(L2) 6.: 90.40% Score(L2) 7.: 85.76% Score(L2) 8.: 90.40% Score(L2) 9.: 89.74% Score(L2) 10.: 87.09%
Average: 89.21%

> Results with optimized C parameter
Optimized C: 0.877
Score(L2) 1.: 89.74% Score(L2) 2.: 89.40% Score(L2) 3.: 90.07% Score(L2) 4.: 91.39% Score(L2) 5.: 89.40%
Score(L2) 6.: 88.41% Score(L2) 7.: 89.40% Score(L2) 8.: 89.40% Score(L2) 9.: 90.40% Score(L2) 10.: 87.75%
Average: 89.54%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 80.46% Score(L1) 2.: 80.13% Score(L1) 3.: 84.44% Score(L1) 4.: 81.79% Score(L1) 5.: 87.75%
Score(L1) 6.: 86.09% Score(L1) 7.: 86.09% Score(L1) 8.: 86.42% Score(L1) 9.: 83.44% Score(L1) 10.: 83.44%
Average: 84.01%

Score(L2) 1.: 91.72% Score(L2) 2.: 88.08% Score(L2) 3.: 90.40% Score(L2) 4.: 84.44% Score(L2) 5.: 87.09%
Score(L2) 6.: 88.08% Score(L2) 7.: 87.42% Score(L2) 8.: 85.10% Score(L2) 9.: 91.39% Score(L2) 10.: 89.40%
Average: 88.31%

> Results with optimized C parameter
Optimized C: 0.925
Score(L2) 1.: 89.40% Score(L2) 2.: 92.05% Score(L2) 3.: 89.07% Score(L2) 4.: 90.40% Score(L2) 5.: 87.42%
Score(L2) 6.: 89.40% Score(L2) 7.: 90.07% Score(L2) 8.: 84.77% Score(L2) 9.: 89.07% Score(L2) 10.: 90.73%
Average: 89.24%

==> Term Frequency–Inverse Document Frequency
=> Multinomial Bayes naive classifier
Score 1.: 85.10% Score 2.: 87.09% Score 3.: 85.10% Score 4.: 86.75% Score 5.: 84.44%
Score 6.: 84.44% Score 7.: 84.77% Score 8.: 85.76% Score 9.: 85.43% Score 10.: 85.10%
Average: 85.40%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 80.13% Score 2.: 77.48% Score 3.: 83.44% Score 4.: 80.46% Score 5.: 81.46%
Score 6.: 79.80% Score 7.: 81.46% Score 8.: 82.45% Score 9.: 80.13% Score 10.: 81.13%
Average: 80.79%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 89.07% Score(L1) 2.: 87.09% Score(L1) 3.: 86.75% Score(L1) 4.: 89.40% Score(L1) 5.: 90.07%
Score(L1) 6.: 90.40% Score(L1) 7.: 87.09% Score(L1) 8.: 85.43% Score(L1) 9.: 88.08% Score(L1) 10.: 89.07%
Average: 88.25%

Score(L2) 1.: 88.41% Score(L2) 2.: 90.07% Score(L2) 3.: 93.05% Score(L2) 4.: 89.40% Score(L2) 5.: 93.71%
Score(L2) 6.: 89.07% Score(L2) 7.: 89.40% Score(L2) 8.: 87.75% Score(L2) 9.: 90.40% Score(L2) 10.: 89.07%

Average: 90.03%

> Results with optimized C parameter
Optimized C: 0.897
Score(L2) 1.: 90.40% Score(L2) 2.: 87.09% Score(L2) 3.: 88.74% Score(L2) 4.: 85.76% Score(L2) 5.: 89.74%
Score(L2) 6.: 89.74% Score(L2) 7.: 86.09% Score(L2) 8.: 88.41% Score(L2) 9.: 89.40% Score(L2) 10.: 89.74%
Average: 88.51%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 83.11% Score(L1) 2.: 84.77% Score(L1) 3.: 82.78% Score(L1) 4.: 82.45% Score(L1) 5.: 81.79%
Score(L1) 6.: 85.43% Score(L1) 7.: 87.42% Score(L1) 8.: 82.45% Score(L1) 9.: 83.44% Score(L1) 10.: 82.12%
Average: 83.58%

Score(L2) 1.: 84.44% Score(L2) 2.: 85.76% Score(L2) 3.: 84.77% Score(L2) 4.: 87.75% Score(L2) 5.: 86.75%
Score(L2) 6.: 86.09% Score(L2) 7.: 86.42% Score(L2) 8.: 87.42% Score(L2) 9.: 90.07% Score(L2) 10.: 87.42%
Average: 86.69%

> Results with optimized C parameter
Optimized C: 1.039
Score(L2) 1.: 85.76% Score(L2) 2.: 87.09% Score(L2) 3.: 87.42% Score(L2) 4.: 83.77% Score(L2) 5.: 83.44%
Score(L2) 6.: 88.41% Score(L2) 7.: 82.45% Score(L2) 8.: 85.76% Score(L2) 9.: 86.09% Score(L2) 10.: 87.42%
Average: 85.76%

==> PorterStemmer
=> Multinomial Bayes naive classifier
Score 1.: 82.78% Score 2.: 83.44% Score 3.: 86.09% Score 4.: 85.43% Score 5.: 84.77%
Score 6.: 87.75% Score 7.: 86.75% Score 8.: 87.42% Score 9.: 84.44% Score 10.: 85.10%
Average: 85.40%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 82.45% Score 2.: 81.46% Score 3.: 81.13% Score 4.: 79.47% Score 5.: 78.15%
Score 6.: 80.46% Score 7.: 80.13% Score 8.: 82.12% Score 9.: 77.15% Score 10.: 82.45%
Average: 80.50%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 88.08% Score(L1) 2.: 89.40% Score(L1) 3.: 88.74% Score(L1) 4.: 86.42% Score(L1) 5.: 86.75%
Score(L1) 6.: 89.74% Score(L1) 7.: 87.75% Score(L1) 8.: 87.09% Score(L1) 9.: 88.08% Score(L1) 10.: 91.06%
Average: 88.31%

Score(L2) 1.: 86.75% Score(L2) 2.: 88.74% Score(L2) 3.: 90.73% Score(L2) 4.: 89.07% Score(L2) 5.: 88.74%
Score(L2) 6.: 88.41% Score(L2) 7.: 88.74% Score(L2) 8.: 90.40% Score(L2) 9.: 88.41% Score(L2) 10.: 89.07%
Average: 88.91%

> Results with optimized C parameter
Optimized C: 0.942
Score(L2) 1.: 90.07% Score(L2) 2.: 90.07% Score(L2) 3.: 86.42% Score(L2) 4.: 86.09% Score(L2) 5.: 89.07%

Score(L2) 6.: 86.75% Score(L2) 7.: 91.72% Score(L2) 8.: 90.07% Score(L2) 9.: 89.40% Score(L2) 10.: 86.42%
Average: 88.61%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 85.76% Score(L1) 2.: 85.76% Score(L1) 3.: 87.09% Score(L1) 4.: 87.09% Score(L1) 5.: 88.08%
Score(L1) 6.: 88.08% Score(L1) 7.: 83.77% Score(L1) 8.: 87.09% Score(L1) 9.: 86.42% Score(L1) 10.: 88.41%
Average: 86.75%

Score(L2) 1.: 86.75% Score(L2) 2.: 86.09% Score(L2) 3.: 84.44% Score(L2) 4.: 86.75% Score(L2) 5.: 88.74%
Score(L2) 6.: 88.74% Score(L2) 7.: 89.07% Score(L2) 8.: 88.74% Score(L2) 9.: 85.43% Score(L2) 10.: 84.77%
Average: 86.95%

> Results with optimized C parameter
Optimized C: 0.944
Score(L2) 1.: 87.75% Score(L2) 2.: 88.08% Score(L2) 3.: 85.76% Score(L2) 4.: 85.10% Score(L2) 5.: 87.42%
Score(L2) 6.: 86.42% Score(L2) 7.: 89.74% Score(L2) 8.: 88.74% Score(L2) 9.: 87.75% Score(L2) 10.: 87.75%
Average: 87.45%

==> Frequency word filtering
=> Multinomial Bayes naive classifier
Score 1.: 84.77% Score 2.: 84.44% Score 3.: 81.13% Score 4.: 80.13% Score 5.: 84.77%
Score 6.: 80.13% Score 7.: 84.11% Score 8.: 84.77% Score 9.: 82.78% Score 10.: 83.77%
Average: 83.08%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 76.82% Score 2.: 74.50% Score 3.: 78.15% Score 4.: 82.78% Score 5.: 79.14%
Score 6.: 83.11% Score 7.: 82.12% Score 8.: 80.46% Score 9.: 81.79% Score 10.: 77.15%
Average: 79.60%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 85.10% Score(L1) 2.: 90.07% Score(L1) 3.: 90.07% Score(L1) 4.: 92.72% Score(L1) 5.: 85.10%
Score(L1) 6.: 86.42% Score(L1) 7.: 88.08% Score(L1) 8.: 86.09% Score(L1) 9.: 87.09% Score(L1) 10.: 91.39%
Average: 88.21%

Score(L2) 1.: 88.74% Score(L2) 2.: 89.07% Score(L2) 3.: 89.40% Score(L2) 4.: 90.73% Score(L2) 5.: 90.07%
Score(L2) 6.: 89.74% Score(L2) 7.: 90.07% Score(L2) 8.: 88.74% Score(L2) 9.: 90.07% Score(L2) 10.: 90.07%
Average: 89.67%

> Results with optimized C parameter
Optimized C: 0.916
Score(L2) 1.: 88.08% Score(L2) 2.: 88.74% Score(L2) 3.: 90.73% Score(L2) 4.: 87.75% Score(L2) 5.: 90.40%
Score(L2) 6.: 90.40% Score(L2) 7.: 91.39% Score(L2) 8.: 87.42% Score(L2) 9.: 91.06% Score(L2) 10.: 88.08%
Average: 89.40%

=> Logistic regression
> L1/L2 comparing

Score(L1) 1.: 83.44% Score(L1) 2.: 82.78% Score(L1) 3.: 85.76% Score(L1) 4.: 83.77% Score(L1) 5.: 82.45%
Score(L1) 6.: 84.77% Score(L1) 7.: 82.78% Score(L1) 8.: 85.10% Score(L1) 9.: 83.44% Score(L1) 10.: 84.11%
Average: 83.84%

Score(L2) 1.: 87.75% Score(L2) 2.: 87.42% Score(L2) 3.: 86.42% Score(L2) 4.: 87.42% Score(L2) 5.: 86.42%
Score(L2) 6.: 87.09% Score(L2) 7.: 84.11% Score(L2) 8.: 84.44% Score(L2) 9.: 86.09% Score(L2) 10.: 86.42%
Average: 86.36%

> Results with optimized C parameter
Optimized C: 1.048
Score(L2) 1.: 84.77% Score(L2) 2.: 87.09% Score(L2) 3.: 87.75% Score(L2) 4.: 86.09% Score(L2) 5.: 87.09%
Score(L2) 6.: 86.75% Score(L2) 7.: 84.11% Score(L2) 8.: 86.09% Score(L2) 9.: 89.07% Score(L2) 10.: 87.75%
Average: 86.66%

==> Bigram preprocessing
=> Multinomial Bayes naive classifier
Score 1.: 79.14% Score 2.: 83.77% Score 3.: 81.79% Score 4.: 82.12% Score 5.: 76.49%
Score 6.: 79.47% Score 7.: 83.11% Score 8.: 79.47% Score 9.: 77.48% Score 10.: 84.77%
Average: 80.76%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 75.50% Score 2.: 71.85% Score 3.: 73.84% Score 4.: 74.50% Score 5.: 75.50%
Score 6.: 73.84% Score 7.: 74.83% Score 8.: 76.16% Score 9.: 73.51% Score 10.: 74.50%
Average: 74.40%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 81.46% Score(L1) 2.: 89.74% Score(L1) 3.: 87.09% Score(L1) 4.: 86.09% Score(L1) 5.: 82.45%
Score(L1) 6.: 88.74% Score(L1) 7.: 85.43% Score(L1) 8.: 85.43% Score(L1) 9.: 88.41% Score(L1) 10.: 85.76%
Average: 86.06%

Score(L2) 1.: 87.75% Score(L2) 2.: 87.75% Score(L2) 3.: 86.75% Score(L2) 4.: 87.09% Score(L2) 5.: 86.42%
Score(L2) 6.: 85.10% Score(L2) 7.: 88.41% Score(L2) 8.: 88.08% Score(L2) 9.: 87.42% Score(L2) 10.: 87.42%
Average: 87.22%

> Results with optimized C parameter
Optimized C: 0.966
Score(L2) 1.: 88.74% Score(L2) 2.: 85.76% Score(L2) 3.: 89.07% Score(L2) 4.: 87.42% Score(L2) 5.: 87.42%
Score(L2) 6.: 88.74% Score(L2) 7.: 86.09% Score(L2) 8.: 87.42% Score(L2) 9.: 86.42% Score(L2) 10.: 85.43%
Average: 87.25%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 84.44% Score(L1) 2.: 84.44% Score(L1) 3.: 84.44% Score(L1) 4.: 85.10% Score(L1) 5.: 83.77%
Score(L1) 6.: 84.77% Score(L1) 7.: 84.11% Score(L1) 8.: 87.09% Score(L1) 9.: 86.75% Score(L1) 10.: 83.44%
Average: 84.83%

Score(L2) 1.: 86.09% Score(L2) 2.: 84.44% Score(L2) 3.: 83.77% Score(L2) 4.: 86.09% Score(L2) 5.: 84.11%

Score(L2) 6.: 81.79% Score(L2) 7.: 83.44% Score(L2) 8.: 88.08% Score(L2) 9.: 84.44% Score(L2) 10.: 87.09%
Average: 84.93%

> Results with optimized C parameter
Optimized C: 1.002
Score(L2) 1.: 87.75% Score(L2) 2.: 84.44% Score(L2) 3.: 85.76% Score(L2) 4.: 86.42% Score(L2) 5.: 84.11%
Score(L2) 6.: 86.42% Score(L2) 7.: 83.77% Score(L2) 8.: 89.07% Score(L2) 9.: 87.42% Score(L2) 10.: 87.09%
Average: 86.23%

==> Trigram preprocessing
=> Multinomial Bayes naive classifier
Score 1.: 70.20% Score 2.: 73.18% Score 3.: 74.50% Score 4.: 75.17% Score 5.: 69.87%
Score 6.: 73.51% Score 7.: 74.83% Score 8.: 68.21% Score 9.: 71.85% Score 10.: 75.83%
Average: 72.72%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 72.19% Score 2.: 69.54% Score 3.: 70.53% Score 4.: 68.87% Score 5.: 66.56%
Score 6.: 71.85% Score 7.: 67.88% Score 8.: 69.54% Score 9.: 70.53% Score 10.: 71.52%
Average: 69.90%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 86.42% Score(L1) 2.: 86.42% Score(L1) 3.: 82.78% Score(L1) 4.: 84.11% Score(L1) 5.: 87.42%
Score(L1) 6.: 86.75% Score(L1) 7.: 85.76% Score(L1) 8.: 85.76% Score(L1) 9.: 85.10% Score(L1) 10.: 87.42%
Average: 85.79%

Score(L2) 1.: 84.77% Score(L2) 2.: 86.09% Score(L2) 3.: 83.11% Score(L2) 4.: 84.44% Score(L2) 5.: 84.44%
Score(L2) 6.: 85.76% Score(L2) 7.: 86.09% Score(L2) 8.: 85.10% Score(L2) 9.: 84.77% Score(L2) 10.: 83.77%
Average: 84.83%

> Results with optimized C parameter
Optimized C: 1.006
Score(L2) 1.: 87.75% Score(L2) 2.: 84.44% Score(L2) 3.: 85.76% Score(L2) 4.: 84.77% Score(L2) 5.: 87.42%
Score(L2) 6.: 85.43% Score(L2) 7.: 85.43% Score(L2) 8.: 84.44% Score(L2) 9.: 84.44% Score(L2) 10.: 87.42%
Average: 85.73%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 80.79% Score(L1) 2.: 81.46% Score(L1) 3.: 75.83% Score(L1) 4.: 80.46% Score(L1) 5.: 81.13%
Score(L1) 6.: 77.15% Score(L1) 7.: 79.80% Score(L1) 8.: 82.12% Score(L1) 9.: 78.15% Score(L1) 10.: 81.13%
Average: 79.80%

Score(L2) 1.: 83.44% Score(L2) 2.: 81.79% Score(L2) 3.: 79.14% Score(L2) 4.: 80.46% Score(L2) 5.: 82.78%
Score(L2) 6.: 82.45% Score(L2) 7.: 83.44% Score(L2) 8.: 82.12% Score(L2) 9.: 81.46% Score(L2) 10.: 84.11%
Average: 82.12%

> Results with optimized C parameter
Optimized C: 1.056

Score(L2) 1.: 83.77% Score(L2) 2.: 82.45% Score(L2) 3.: 79.80% Score(L2) 4.: 83.44% Score(L2) 5.: 79.80%
Score(L2) 6.: 83.77% Score(L2) 7.: 81.13% Score(L2) 8.: 81.79% Score(L2) 9.: 82.12% Score(L2) 10.: 82.78%
Average: 82.09%

===> Second phase
==> No preprocessing
=> Multinomial Bayes naive classifier
Score 1.: 85.10% Score 2.: 84.11% Score 3.: 83.77% Score 4.: 85.43% Score 5.: 85.10%
Score 6.: 83.44% Score 7.: 82.78% Score 8.: 83.44% Score 9.: 86.42% Score 10.: 82.12%
Average: 84.17%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 79.14% Score 2.: 76.82% Score 3.: 80.46% Score 4.: 73.51% Score 5.: 77.81%
Score 6.: 78.15% Score 7.: 77.48% Score 8.: 75.17% Score 9.: 78.81% Score 10.: 75.83%
Average: 77.32%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 89.40% Score(L1) 2.: 86.42% Score(L1) 3.: 87.09% Score(L1) 4.: 85.76% Score(L1) 5.: 88.74%
Score(L1) 6.: 85.43% Score(L1) 7.: 86.42% Score(L1) 8.: 87.42% Score(L1) 9.: 84.77% Score(L1) 10.: 87.09%
Average: 86.85%

Score(L2) 1.: 87.75% Score(L2) 2.: 86.42% Score(L2) 3.: 86.09% Score(L2) 4.: 86.42% Score(L2) 5.: 89.07%
Score(L2) 6.: 89.07% Score(L2) 7.: 89.07% Score(L2) 8.: 87.75% Score(L2) 9.: 87.42% Score(L2) 10.: 88.08%
Average: 87.72%

> Results with optimized C parameter
Optimized C: 1.471
Score(L2) 1.: 83.11% Score(L2) 2.: 88.41% Score(L2) 3.: 89.74% Score(L2) 4.: 88.74% Score(L2) 5.: 86.42%
Score(L2) 6.: 88.74% Score(L2) 7.: 87.75% Score(L2) 8.: 90.73% Score(L2) 9.: 86.42% Score(L2) 10.: 87.42%
Average: 87.75%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 90.07% Score(L1) 2.: 87.75% Score(L1) 3.: 88.08% Score(L1) 4.: 86.75% Score(L1) 5.: 85.10%
Score(L1) 6.: 87.75% Score(L1) 7.: 87.75% Score(L1) 8.: 83.77% Score(L1) 9.: 87.42% Score(L1) 10.: 83.44%
Average: 86.79%

Score(L2) 1.: 86.75% Score(L2) 2.: 86.09% Score(L2) 3.: 88.41% Score(L2) 4.: 84.77% Score(L2) 5.: 89.74%
Score(L2) 6.: 86.42% Score(L2) 7.: 89.40% Score(L2) 8.: 87.42% Score(L2) 9.: 87.09% Score(L2) 10.: 90.40%
Average: 87.65%

> Results with optimized C parameter
Optimized C: 1.504
Score(L2) 1.: 86.42% Score(L2) 2.: 84.44% Score(L2) 3.: 85.10% Score(L2) 4.: 87.42% Score(L2) 5.: 88.08%
Score(L2) 6.: 89.07% Score(L2) 7.: 88.08% Score(L2) 8.: 89.07% Score(L2) 9.: 89.40% Score(L2) 10.: 87.42%
Average: 87.45%

==> Lower casing
=> Multinomial Bayes naive classifier
Score 1.: 85.43% Score 2.: 89.07% Score 3.: 85.43% Score 4.: 83.77% Score 5.: 86.42%
Score 6.: 87.42% Score 7.: 84.44% Score 8.: 84.44% Score 9.: 88.41% Score 10.: 84.77%
Average: 85.96%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 77.15% Score 2.: 79.47% Score 3.: 77.48% Score 4.: 80.79% Score 5.: 80.46%
Score 6.: 76.16% Score 7.: 78.81% Score 8.: 80.79% Score 9.: 78.15% Score 10.: 75.17%
Average: 78.44%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 86.42% Score(L1) 2.: 87.75% Score(L1) 3.: 87.42% Score(L1) 4.: 86.42% Score(L1) 5.: 87.09%
Score(L1) 6.: 84.77% Score(L1) 7.: 89.40% Score(L1) 8.: 87.42% Score(L1) 9.: 87.42% Score(L1) 10.: 85.43%
Average: 86.95%

Score(L2) 1.: 87.42% Score(L2) 2.: 90.73% Score(L2) 3.: 87.09% Score(L2) 4.: 89.74% Score(L2) 5.: 86.75%
Score(L2) 6.: 86.09% Score(L2) 7.: 88.74% Score(L2) 8.: 85.10% Score(L2) 9.: 84.44% Score(L2) 10.: 88.74%
Average: 87.48%

> Results with optimized C parameter
Optimized C: 1.503
Score(L2) 1.: 87.75% Score(L2) 2.: 86.09% Score(L2) 3.: 88.08% Score(L2) 4.: 88.08% Score(L2) 5.: 86.42%
Score(L2) 6.: 91.39% Score(L2) 7.: 88.41% Score(L2) 8.: 87.75% Score(L2) 9.: 83.11% Score(L2) 10.: 89.07%
Average: 87.62%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 85.10% Score(L1) 2.: 86.42% Score(L1) 3.: 85.43% Score(L1) 4.: 82.12% Score(L1) 5.: 87.09%
Score(L1) 6.: 87.75% Score(L1) 7.: 85.76% Score(L1) 8.: 85.10% Score(L1) 9.: 85.76% Score(L1) 10.: 88.08%
Average: 85.86%

Score(L2) 1.: 88.41% Score(L2) 2.: 87.75% Score(L2) 3.: 85.76% Score(L2) 4.: 89.40% Score(L2) 5.: 88.41%
Score(L2) 6.: 87.75% Score(L2) 7.: 87.09% Score(L2) 8.: 84.77% Score(L2) 9.: 89.07% Score(L2) 10.: 83.44%
Average: 87.19%

> Results with optimized C parameter
Optimized C: 1.483
Score(L2) 1.: 90.07% Score(L2) 2.: 87.75% Score(L2) 3.: 87.75% Score(L2) 4.: 89.74% Score(L2) 5.: 87.42%
Score(L2) 6.: 88.41% Score(L2) 7.: 86.75% Score(L2) 8.: 85.10% Score(L2) 9.: 88.08% Score(L2) 10.: 86.75%
Average: 87.78%

==> Term Frequency
=> Multinomial Bayes naive classifier
Score 1.: 78.48% Score 2.: 84.44% Score 3.: 81.13% Score 4.: 82.12% Score 5.: 77.48%
Score 6.: 79.80% Score 7.: 79.14% Score 8.: 80.79% Score 9.: 81.79% Score 10.: 81.46%

Average: 80.66%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 81.13% Score 2.: 78.81% Score 3.: 74.17% Score 4.: 76.49% Score 5.: 79.14%
Score 6.: 79.80% Score 7.: 79.47% Score 8.: 75.50% Score 9.: 77.15% Score 10.: 79.80%
Average: 78.15%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 88.74% Score(L1) 2.: 84.77% Score(L1) 3.: 85.76% Score(L1) 4.: 88.08% Score(L1) 5.: 86.42%
Score(L1) 6.: 85.43% Score(L1) 7.: 85.10% Score(L1) 8.: 87.09% Score(L1) 9.: 85.10% Score(L1) 10.: 88.08%
Average: 86.46%

Score(L2) 1.: 91.06% Score(L2) 2.: 87.75% Score(L2) 3.: 88.74% Score(L2) 4.: 87.42% Score(L2) 5.: 88.41%
Score(L2) 6.: 88.41% Score(L2) 7.: 90.40% Score(L2) 8.: 87.42% Score(L2) 9.: 89.74% Score(L2) 10.: 87.09%
Average: 88.64%

> Results with optimized C parameter
Optimized C: 1.478
Score(L2) 1.: 91.39% Score(L2) 2.: 88.74% Score(L2) 3.: 89.74% Score(L2) 4.: 89.74% Score(L2) 5.: 88.41%
Score(L2) 6.: 83.77% Score(L2) 7.: 89.40% Score(L2) 8.: 86.75% Score(L2) 9.: 87.09% Score(L2) 10.: 90.40%
Average: 88.54%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 83.44% Score(L1) 2.: 82.78% Score(L1) 3.: 86.42% Score(L1) 4.: 81.13% Score(L1) 5.: 84.11%
Score(L1) 6.: 87.42% Score(L1) 7.: 80.79% Score(L1) 8.: 85.10% Score(L1) 9.: 82.12% Score(L1) 10.: 85.43%
Average: 83.87%

Score(L2) 1.: 85.43% Score(L2) 2.: 81.79% Score(L2) 3.: 79.47% Score(L2) 4.: 82.45% Score(L2) 5.: 84.77%
Score(L2) 6.: 82.78% Score(L2) 7.: 85.10% Score(L2) 8.: 81.13% Score(L2) 9.: 85.10% Score(L2) 10.: 84.44%
Average: 83.25%

> Results with optimized C parameter
Optimized C: 1.751
Score(L2) 1.: 84.77% Score(L2) 2.: 83.44% Score(L2) 3.: 82.12% Score(L2) 4.: 83.77% Score(L2) 5.: 84.77%
Score(L2) 6.: 86.75% Score(L2) 7.: 89.07% Score(L2) 8.: 87.09% Score(L2) 9.: 84.44% Score(L2) 10.: 86.09%
Average: 85.23%

==> Inverse Document Frequency
=> Multinomial Bayes naive classifier
Score 1.: 84.77% Score 2.: 85.10% Score 3.: 83.77% Score 4.: 82.78% Score 5.: 85.76%
Score 6.: 86.42% Score 7.: 84.44% Score 8.: 84.44% Score 9.: 85.43% Score 10.: 86.42%
Average: 84.93%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 72.52% Score 2.: 76.49% Score 3.: 78.15% Score 4.: 77.81% Score 5.: 76.49%
Score 6.: 74.83% Score 7.: 76.49% Score 8.: 77.48% Score 9.: 79.14% Score 10.: 78.15%

Average: 76.75%

=> Support vector classifier

> L1/L2 comparing
Score(L1) 1.: 85.43% Score(L1) 2.: 86.75% Score(L1) 3.: 87.09% Score(L1) 4.: 87.75% Score(L1) 5.: 87.75%
Score(L1) 6.: 89.07% Score(L1) 7.: 85.10% Score(L1) 8.: 85.43% Score(L1) 9.: 86.75% Score(L1) 10.: 87.09%
Average: 86.82%

Score(L2) 1.: 88.08% Score(L2) 2.: 89.40% Score(L2) 3.: 87.09% Score(L2) 4.: 87.42% Score(L2) 5.: 89.74%
Score(L2) 6.: 85.43% Score(L2) 7.: 87.75% Score(L2) 8.: 86.09% Score(L2) 9.: 85.43% Score(L2) 10.: 86.75%
Average: 87.32%

> Results with optimized C parameter
Optimized C: 1.497
Score(L2) 1.: 89.07% Score(L2) 2.: 89.74% Score(L2) 3.: 88.41% Score(L2) 4.: 85.10% Score(L2) 5.: 89.07%
Score(L2) 6.: 87.75% Score(L2) 7.: 89.74% Score(L2) 8.: 83.77% Score(L2) 9.: 88.74% Score(L2) 10.: 88.74%
Average: 88.01%

=> Logistic regression

> L1/L2 comparing
Score(L2) 1.: 87.42% Score(L2) 2.: 90.07% Score(L2) 3.: 87.09% Score(L2) 4.: 87.42% Score(L2) 5.: 89.07%
Score(L2) 6.: 85.76% Score(L2) 7.: 86.09% Score(L2) 8.: 89.40% Score(L2) 9.: 86.09% Score(L2) 10.: 88.08%
Average: 87.65%

Score(L1) 1.: 85.43% Score(L1) 2.: 81.79% Score(L1) 3.: 80.79% Score(L1) 4.: 82.78% Score(L1) 5.: 83.11%
Score(L1) 6.: 80.79% Score(L1) 7.: 85.43% Score(L1) 8.: 81.79% Score(L1) 9.: 86.09% Score(L1) 10.:82.45%
Average: 83.05%

> Results with optimized C parameter
Optimized C: 1.462
Score(L2) 1.: 89.74% Score(L2) 2.: 89.07% Score(L2) 3.: 88.08% Score(L2) 4.: 88.74% Score(L2) 5.: 85.43%
Score(L2) 6.: 87.09% Score(L2) 7.: 87.09% Score(L2) 8.: 89.40% Score(L2) 9.: 86.75% Score(L2) 10.: 89.74%
Average: 88.11%

==> Term Frequency–Inverse Document Frequency
=> Multinomial Bayes naive classifier
Score 1.: 81.46% Score 2.: 84.44% Score 3.: 79.47% Score 4.: 84.77% Score 5.: 81.79%
Score 6.: 84.11% Score 7.: 83.77% Score 8.: 79.80% Score 9.: 80.46% Score 10.: 81.13%
Average: 82.12%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 82.45% Score 2.: 79.14% Score 3.: 78.15% Score 4.: 76.82% Score 5.: 80.46%
Score 6.: 77.81% Score 7.: 77.15% Score 8.: 77.48% Score 9.: 75.83% Score 10.: 75.17%
Average: 78.05%

=> Support vector classifier

> L1/L2 comparing
Score(L1) 1.: 85.43% Score(L1) 2.: 87.09% Score(L1) 3.: 87.09% Score(L1) 4.: 84.77% Score(L1) 5.: 88.41%

Score(L1) 6.: 86.42% Score(L1) 7.: 87.09% Score(L1) 8.: 85.10% Score(L1) 9.: 86.09% Score(L1) 10.: 87.42%
Average: 86.49%

Score(L2) 1.: 88.41% Score(L2) 2.: 88.74% Score(L2) 3.: 88.41% Score(L2) 4.: 87.42% Score(L2) 5.: 88.41%
Score(L2) 6.: 87.75% Score(L2) 7.: 90.73% Score(L2) 8.: 89.74% Score(L2) 9.: 87.75% Score(L2) 10.: 86.09%
Average: 88.34%

> Results with optimized C parameter
Optimized C: 1.477
Score(L2) 1.: 87.42% Score(L2) 2.: 86.09% Score(L2) 3.: 89.07% Score(L2) 4.: 86.75% Score(L2) 5.: 85.43%
Score(L2) 6.: 87.75% Score(L2) 7.: 89.07% Score(L2) 8.: 91.06% Score(L2) 9.: 90.07% Score(L2) 10.: 89.74%
Average: 88.25%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 86.42% Score(L1) 2.: 84.44% Score(L1) 3.: 82.78% Score(L1) 4.: 81.79% Score(L1) 5.: 83.77%
Score(L1) 6.: 84.44% Score(L1) 7.: 83.11% Score(L1) 8.: 83.11% Score(L1) 9.: 81.46% Score(L1) 10.: 84.44%
Average: 83.58%

Score(L2) 1.: 85.10% Score(L2) 2.: 85.10% Score(L2) 3.: 83.77% Score(L2) 4.: 86.42% Score(L2) 5.: 86.42%
Score(L2) 6.: 81.79% Score(L2) 7.: 84.44% Score(L2) 8.: 82.78% Score(L2) 9.: 82.45% Score(L2) 10.: 82.78%
Average: 84.11%

> Results with optimized C parameter
Optimized C: 1.706
Score(L2) 1.: 86.75% Score(L2) 2.: 83.11% Score(L2) 3.: 83.11% Score(L2) 4.: 86.09% Score(L2) 5.: 85.10%
Score(L2) 6.: 86.42% Score(L2) 7.: 85.10% Score(L2) 8.: 86.09% Score(L2) 9.: 84.11% Score(L2) 10.: 87.42%
Average: 85.33%

==> PorterStemmer
=> Multinomial Bayes naive classifier
Score 1.: 84.77% Score 2.: 81.79% Score 3.: 85.76% Score 4.: 82.45% Score 5.: 84.44%
Score 6.: 79.47% Score 7.: 83.77% Score 8.: 80.79% Score 9.: 85.10% Score 10.: 83.44%
Average: 83.18%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 75.50% Score 2.: 78.81% Score 3.: 81.46% Score 4.: 78.48% Score 5.: 75.17%
Score 6.: 79.47% Score 7.: 77.48% Score 8.: 76.49% Score 9.: 78.81% Score 10.: 79.80%
Average: 78.15%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 87.42% Score(L1) 2.: 86.75% Score(L1) 3.: 87.75% Score(L1) 4.: 85.76% Score(L1) 5.: 87.42%
Score(L1) 6.: 85.76% Score(L1) 7.: 86.75% Score(L1) 8.: 86.42% Score(L1) 9.: 86.42% Score(L1) 10.: 88.41%
Average: 86.89%

Score(L2) 1.: 88.08% Score(L2) 2.: 88.74% Score(L2) 3.: 84.11% Score(L2) 4.: 81.13% Score(L2) 5.: 86.75%
Score(L2) 6.: 89.40% Score(L2) 7.: 88.74% Score(L2) 8.: 87.09% Score(L2) 9.: 84.77% Score(L2) 10.: 85.76%

Average: 86.46%

> Results with optimized C parameter
Optimized C: 1.520
Score(L2) 1.: 85.10% Score(L2) 2.: 85.43% Score(L2) 3.: 85.10% Score(L2) 4.: 84.44% Score(L2) 5.: 85.10%
Score(L2) 6.: 86.75% Score(L2) 7.: 88.08% Score(L2) 8.: 84.44% Score(L2) 9.: 85.76% Score(L2) 10.: 88.08%
Average: 85.83%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 85.43% Score(L1) 2.: 85.10% Score(L1) 3.: 84.11% Score(L1) 4.: 84.11% Score(L1) 5.: 86.75%
Score(L1) 6.: 84.44% Score(L1) 7.: 86.09% Score(L1) 8.: 83.44% Score(L1) 9.: 85.43% Score(L1) 10.: 85.43%
Average: 85.03%

Score(L2) 1.: 84.77% Score(L2) 2.: 84.44% Score(L2) 3.: 86.09% Score(L2) 4.: 84.11% Score(L2) 5.: 87.75%
Score(L2) 6.: 82.78% Score(L2) 7.: 87.75% Score(L2) 8.: 88.41% Score(L2) 9.: 80.79% Score(L2) 10.: 85.43%
Average: 85.23%

> Results with optimized C parameter
Optimized C: 1.519
Score(L2) 1.: 86.42% Score(L2) 2.: 87.09% Score(L2) 3.: 87.42% Score(L2) 4.: 87.42% Score(L2) 5.: 85.43%
Score(L2) 6.: 84.77% Score(L2) 7.: 85.43% Score(L2) 8.: 89.07% Score(L2) 9.: 85.76% Score(L2) 10.: 86.42%
Average: 86.52%

==> Frequency word filtering
=> Multinomial Bayes naive classifier
Score 1.: 81.79% Score 2.: 81.13% Score 3.: 80.13% Score 4.: 79.14% Score 5.: 82.45%
Score 6.: 80.79% Score 7.: 81.13% Score 8.: 80.46% Score 9.: 79.80% Score 10.: 82.45%
Average: 80.93%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 76.82% Score 2.: 78.15% Score 3.: 78.81% Score 4.: 75.50% Score 5.: 76.49%
Score 6.: 79.14% Score 7.: 79.47% Score 8.: 76.49% Score 9.: 76.49% Score 10.: 74.50%
Average: 77.19%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 87.42% Score(L1) 2.: 87.42% Score(L1) 3.: 87.75% Score(L1) 4.: 82.45% Score(L1) 5.: 87.09%
Score(L1) 6.: 88.08% Score(L1) 7.: 84.77% Score(L1) 8.: 84.11% Score(L1) 9.: 84.44% Score(L1) 10.: 86.75%
Average: 86.03%

Score(L2) 1.: 86.42% Score(L2) 2.: 87.42% Score(L2) 3.: 87.75% Score(L2) 4.: 89.74% Score(L2) 5.: 87.42%
Score(L2) 6.: 89.74% Score(L2) 7.: 86.75% Score(L2) 8.: 90.40% Score(L2) 9.: 88.41% Score(L2) 10.: 87.42%
Average: 88.15%

> Results with optimized C parameter
Optimized C: 1.475
Score(L2) 1.: 86.42% Score(L2) 2.: 88.41% Score(L2) 3.: 86.75% Score(L2) 4.: 87.09% Score(L2) 5.: 87.42%

Score(L2) 6.: 90.07% Score(L2) 7.: 87.09% Score(L2) 8.: 88.08% Score(L2) 9.: 84.44% Score(L2) 10.: 87.75%
Average: 87.35%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 84.77% Score(L1) 2.: 85.76% Score(L1) 3.: 82.78% Score(L1) 4.: 81.46% Score(L1) 5.: 85.43%
Score(L1) 6.: 82.78% Score(L1) 7.: 85.76% Score(L1) 8.: 85.10% Score(L1) 9.: 86.09% Score(L1) 10.: 83.77%
Average: 84.37%

Score(L2) 1.: 84.77% Score(L2) 2.: 84.44% Score(L2) 3.: 83.44% Score(L2) 4.: 82.12% Score(L2) 5.: 85.43%
Score(L2) 6.: 86.09% Score(L2) 7.: 81.13% Score(L2) 8.: 81.46% Score(L2) 9.: 83.11% Score(L2) 10.: 83.11%
Average: 83.51%

> Results with optimized C parameter
Optimized C: 1.703
Score(L2) 1.: 85.10% Score(L2) 2.: 85.43% Score(L2) 3.: 86.09% Score(L2) 4.: 84.44% Score(L2) 5.: 85.10%
Score(L2) 6.: 84.77% Score(L2) 7.: 85.43% Score(L2) 8.: 86.75% Score(L2) 9.: 83.77% Score(L2) 10.: 82.78%
Average: 84.97%

==> Bigram preprocessing
=> Multinomial Bayes naive classifier
Score 1.: 79.47% Score 2.: 81.13% Score 3.: 82.78% Score 4.: 81.46% Score 5.: 82.12%
Score 6.: 77.15% Score 7.: 79.80% Score 8.: 83.11% Score 9.: 81.79% Score 10.: 81.46%
Average: 81.03%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 71.52% Score 2.: 71.19% Score 3.: 71.52% Score 4.: 70.86% Score 5.: 73.84%
Score 6.: 74.17% Score 7.: 71.19% Score 8.: 71.85% Score 9.: 73.51% Score 10.: 72.85%
Average: 72.25%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 84.44% Score(L1) 2.: 86.42% Score(L1) 3.: 87.75% Score(L1) 4.: 85.43% Score(L1) 5.: 82.78%
Score(L1) 6.: 85.10% Score(L1) 7.: 85.76% Score(L1) 8.: 85.10% Score(L1) 9.: 83.44% Score(L1) 10.: 85.76%
Average: 85.20%

Score(L2) 1.: 88.08% Score(L2) 2.: 87.09% Score(L2) 3.: 88.74% Score(L2) 4.: 86.42% Score(L2) 5.: 86.75%
Score(L2) 6.: 83.77% Score(L2) 7.: 84.44% Score(L2) 8.: 82.78% Score(L2) 9.: 85.10% Score(L2) 10.: 87.42%
Average: 86.06%

> Results with optimized C parameter
Optimized C: 1.580
Score(L2) 1.: 82.12% Score(L2) 2.: 84.77% Score(L2) 3.: 87.42% Score(L2) 4.: 84.77% Score(L2) 5.: 88.74%
Score(L2) 6.: 88.41% Score(L2) 7.: 88.41% Score(L2) 8.: 86.75% Score(L2) 9.: 86.09% Score(L2) 10.: 88.41%
Average: 86.59%

=> Logistic regression
> L1/L2 comparing

Score(L1) 1.: 82.12% Score(L1) 2.: 82.45% Score(L1) 3.: 80.79% Score(L1) 4.: 82.78% Score(L1) 5.: 82.12%
Score(L1) 6.: 82.45% Score(L1) 7.: 79.14% Score(L1) 8.: 82.78% Score(L1) 9.: 85.76% Score(L1) 10.: 83.44%
Average: 82.38%

Score(L2) 1.: 83.44% Score(L2) 2.: 83.44% Score(L2) 3.: 83.44% Score(L2) 4.: 80.79% Score(L2) 5.: 84.77%
Score(L2) 6.: 84.44% Score(L2) 7.: 80.79% Score(L2) 8.: 79.14% Score(L2) 9.: 86.75% Score(L2) 10.: 83.77%
Average: 83.08%

> Results with optimized C parameter
Optimized C: 1.660
Score(L2) 1.: 82.78% Score(L2) 2.: 84.11% Score(L2) 3.: 84.77% Score(L2) 4.: 87.42% Score(L2) 5.: 86.42%
Score(L2) 6.: 86.09% Score(L2) 7.: 82.12% Score(L2) 8.: 86.42% Score(L2) 9.: 83.44% Score(L2) 10.: 88.74%
Average: 85.23%

==> Trigram preprocessing
=> Multinomial Bayes naive classifier
Score 1.: 72.85% Score 2.: 71.52% Score 3.: 72.19% Score 4.: 70.86% Score 5.: 70.20%
Score 6.: 72.52% Score 7.: 70.53% Score 8.: 70.53% Score 9.: 77.15% Score 10.: 74.83%
Average: 72.32%

=> Bernoulli multinomial Bayes naive classifier
Score 1.: 68.87% Score 2.: 66.89% Score 3.: 67.55% Score 4.: 64.90% Score 5.: 64.24%
Score 6.: 67.55% Score 7.: 71.19% Score 8.: 67.55% Score 9.: 66.56% Score 10.: 66.23%
Average: 67.15%

=> Support vector classifier
> L1/L2 comparing
Score(L1) 1.: 84.44% Score(L1) 2.: 84.44% Score(L1) 3.: 81.46% Score(L1) 4.: 81.79% Score(L1) 5.: 82.78%
Score(L1) 6.: 80.46% Score(L1) 7.: 83.77% Score(L1) 8.: 84.11% Score(L1) 9.: 83.44% Score(L1) 10.: 83.77%
Average: 83.05%

Score(L2) 1.: 85.76% Score(L2) 2.: 83.77% Score(L2) 3.: 84.77% Score(L2) 4.: 84.11% Score(L2) 5.: 82.45%
Score(L2) 6.: 82.45% Score(L2) 7.: 79.80% Score(L2) 8.: 81.13% Score(L2) 9.: 84.77% Score(L2) 10.: 82.78%
Average: 83.18%

> Results with optimized C parameter
Optimized C: 1.632
Score(L2) 1.: 85.76% Score(L2) 2.: 81.46% Score(L2) 3.: 80.79% Score(L2) 4.: 84.44% Score(L2) 5.: 84.77%
Score(L2) 6.: 85.10% Score(L2) 7.: 82.12% Score(L2) 8.: 84.44% Score(L2) 9.: 80.79% Score(L2) 10.: 83.44%
Average: 83.31%

=> Logistic regression
> L1/L2 comparing
Score(L1) 1.: 77.15% Score(L1) 2.: 79.14% Score(L1) 3.: 79.14% Score(L1) 4.: 81.13% Score(L1) 5.: 76.82%
Score(L1) 6.: 81.79% Score(L1) 7.: 80.79% Score(L1) 8.: 76.49% Score(L1) 9.: 76.49% Score(L1) 10.: 79.14%
Average: 78.81%

Score(L2) 1.: 82.12% Score(L2) 2.: 79.80% Score(L2) 3.: 79.80% Score(L2) 4.: 80.79% Score(L2) 5.: 81.46%

Score(L2) 6.: 79.80% Score(L2) 7.: 83.11% Score(L2) 8.: 79.47% Score(L2) 9.: 79.80% Score(L2) 10.: 80.79%
Average: 80.70%

> Results with optimized C parameter
Optimized C: 1.747
Score(L2) 1.: 79.80% Score(L2) 2.: 81.46% Score(L2) 3.: 77.15% Score(L2) 4.: 81.79% Score(L2) 5.: 80.79%
Score(L2) 6.: 80.46% Score(L2) 7.: 84.77% Score(L2) 8.: 79.80% Score(L2) 9.: 84.11% Score(L2) 10.: 85.76%
Average: 81.59%