table1 cosine															
	rails	joomla	angular	ceph	ansible	facebook	elastic	docker	cocos2d	django	hashicorp	emberjs	JuliaLang	dotnet	average
preciou@1	100.00%	97.37%	100.00%	100.00%	100.00%	97.37%	84.21%	100.00%	97. 37%	97.30%	100.00%	86.84%	69. 23%	60.53%	92.16%
preciou@2	100.00%	97.40%	100.00%	97.40%	92.21%	79.22%	50.65%	72.00%	65. 79%	65.33%	62.67%	53.95%	41.03%	33.77%	72.24%
preciou@3	98. 28%	90.43%	100.00%	78. 45%	70.69%	54.31%	37. 39%	48.67%	46.49%	44.64%	41.96%	36.84%	27.97%	23.28%	57.10%
preciou@4	94. 19%	74.03%	100.00%	61.29%	55. 48%	41.29%	28. 57%	36. 42%	35. 53%	33. 33%	32.67%	27. 45%	22. 29%	17.42%	47.14%
preciou@5	89.69%	62.69%	100.00%	50. 52%	45.88%	34.02%	23. 32%	29.63%	28.42%	26. 74%	26.74%	21.99%	18. 27%	14.51%	40.89%
recall@1	19.10%	24. 34%	8.93%	36.54%	36.89%	50.00%	51.61%	60.66%	64.91%	65. 45%	71. 15%	71.74%	64. 29%	76.67%	50.16%
recall@2	38.69%	49.34%	18.75%	72.12%	68.93%	82.43%	62.90%	88. 52%	87.72%	89.09%	90.38%	89.13%	76. 19%	86.67%	71.49%
recall@3	57. 29%	68.42%	28.57%	87.50%	79.61%	85. 14%	69.35%	90.16%	92.98%	90.91%	90.38%	91.30%	78. 57%	90.00%	78. 59%
recall@4	73. 37%	75.00%	38.39%	91.35%	83.50%	86.49%	70.97%	90.16%	94. 74%	90.91%	94. 23%	91.30%	83.33%	90.00%	82.41%
recall@5	87.44%	79.61%	48.21%	94.23%	86.41%	89.19%	72.58%	91.80%	94. 74%	90.91%	96. 15%	91.30%	85. 71%	93.33%	85.83%
f1-score@1	32.07%	38.95%	16.39%	53. 52%	53.90%	66.07%	64.00%	75. 51%	77.89%	78. 26%	83.15%	78. 57%	66.67%	67.65%	64.96%
f1-score@2	55.80%	65.50%	31.58%	82.87%	78.89%	80.79%	56. 12%	79.41%	75 . 19%	75. 38%	74.02%	67. 21%	53. 33%	48.60%	71.87%
f1-score@3	72.38%	77.90%	44.44%	82.73%	74.89%	66.32%	48.59%	63. 22%	61.99%	59.88%	57.32%	52.50%	41.25%	36.99%	66.14%
f1-score@4	82.49%	74. 51%	55. 48%	73. 36%	66.67%	55.90%	40.74%	51.89%	51.67%	48.78%	48.51%	42.21%	35. 18%	29.19%	59.97%
f1-score@5	88. 55%	70.14%	65.06%	65.77%	59.93%	49.25%	35. 29%	44.80%	43.72%	41.32%	41.84%	35. 44%	30.13%	25.11%	55.39%
MRR	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
MAP@1	100.00%	96.58%	100.00%	100.00%	100.00%	95.96%	82.71%	100.00%	97. 23%	95. 24%	100.00%	85. 30%	58. 36%	55.51%	90.49%
MAP@2	100.00%	95.69%	100.00%	96.99%	91. 73%	76. 55%	47. 47%	71.04%	62.49%	63. 20%	61.74%	50.86%	32. 44%	29.38%	69.97%
MAP@3	97. 70%	88.30%	100.00%	77. 35%	68. 37%	51.92%	33.30%	47. 79%	43. 22%	42.86%	41.34%	34. 37%	21.76%	19.80%	54.86%
MAP@4	93. 27%	71.68%	100.00%	59.69%	52.80%	39. 14%	25.09%	35. 76%	32.70%	32.01%	31.37%	25.61%	16. 68%	14.82%	45.04%
MAP@5	87.95%	59.64%	100.00%	48.63%	42.90%	31.65%	20.17%	28.74%	26. 16%	25.67%	25.32%	20.51%	13.39%	11.99%	38.77%

table2 hamming															
	rails	joomla	angular	ceph	ansible	facebook	elastic	docker	cocos2d	django	hashicorp	emberjs	JuliaLang	dotnet	average
preciou@1	100.00%	97.37%	100.00%	97.37%	94. 74%	92.11%	78.95%	83.78%	89.47%	81.08%	89.19%	81.58%	66.67%	60.53%	86.63%
preciou@2	97.40%	96.10%	100.00%	92.21%	90.91%	76.62%	49.35%	66.67%	60.53%	62.67%	62.67%	52.63%	39.74%	33.77%	70.09%
preciou@3	97.41%	90.43%	100.00%	69.83%	68. 97%	54.31%	33.91%	46.90%	42.98%	42.86%	42.86%	35. 96%	26. 27%	24.14%	55. 49%
preciou@4	96. 13%	74.68%	100.00%	55. 48%	54. 19%	41.29%	25. 32%	35. 10%	32. 24%	32.00%	32.00%	26.80%	19.75%	18.06%	45. 93%
preciou@5	88.14%	60.10%	98. 15%	44.85%	44.85%	32.99%	21.24%	28.04%	25. 79%	25.67%	25.67%	21.47%	16.75%	14.51%	39. 16%
recall@1	19.10%	24. 34%	8.93%	35.58%	34.95%	47.30%	48.39%	50.82%	59.65%	54. 55%	63.46%	67.39%	61.90%	76.67%	46.64%
recall@2	37.69%	48.68%	18.75%	68.27%	67.96%	79. 73%	61.29%	81.97%	80.70%	85. 45%	90.38%	86.96%	73.81%	86.67%	69.17%
recall@3	56. 78%	68.42%	28.57%	77.88%	77.67%	85. 14%	62.90%	86.89%	85. 96%	87. 27%	92.31%	89.13%	73.81%	93.33%	76. 15%
recall@4	74.87%	75.66%	38.39%	82.69%	81.55%	86. 49%	62.90%	86.89%	85. 96%	87. 27%	92.31%	89.13%	73.81%	93.33%	79.38%
recall@5	85.93%	76 . 32%	47.32%	83.65%	84. 47%	86. 49%	66.13%	86.89%	85. 96%	87. 27%	92.31%	89.13%	78. 57%	93.33%	81.70%
f1-score@1	32.07%	38.95%	16.39%	52.11%	51.06%	62.50%	60.00%	63. 27%	71. 58%	65. 22%	74. 16%	73.81%	64. 20%	67.65%	60.64%
f1-score@2	54.35%	64.63%	31.58%	78.45%	77. 78%	78. 15%	54.68%	73. 53%	69. 17%	72.31%	74.02%	65. 57%	51.67%	48.60%	69.62%
f1-score@3	71.75%	77.90%	44.44%	73.64%	73.06%	66. 32%	44.07%	60.92%	57. 31%	57. 48%	58.54%	51.25%	38. 75%	38.36%	64.20%
f1-score@4	84. 18%	75. 16%	55. 48%	66.41%	65. 12%	55.90%	36.11%	50.00%	46.89%	46.83%	47.52%	41.21%	31.16%	30.27%	58. 19%
f1-score@5	87.02%	67.25%	63.86%	58.39%	58. 59%	47. 76%	32. 16%	42.40%	39.68%	39.67%	40.17%	34.60%	27. 62%	25.11%	52.94%
MRR	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
MAP@1	100.00%	97.30%	100.00%	93.69%	91.14%	86.06%	68.90%	72. 23%	83. 24%	74.63%	74.94%	79. 54%	50.95%	48.07%	80.05%
MAP@2	96.80%	94.55%	100.00%	88.03%	85. 97%	70.49%	40.72%	56. 45%	55.04%	54.95%	53.31%	48. 27%	28. 54%	25.92%	64. 22%
MAP@3	96. 17%	88.21%	100.00%	65.70%	64.65%	49. 23%	27.67%	38.96%	38.08%	37.33%	36.18%	32. 56%	18.87%	17.70%	50.81%
MAP@4	94.40%	72.00%	100.00%	51.20%	49.94%	37. 12%	20.66%	29. 15%	28. 56%	27.87%	27.02%	24. 26%	14. 18%	13.25%	42.12%
MAP@5	85.91%	57. 79%	97.89%	41.19%	40.68%	29.66%	16.72%	23. 29%	22.85%	22.36%	21.67%	19.43%	11.49%	10.64%	35.83%

table3 euclidean															
	rails	joomla	angular	ceph	ansible	facebook	elastic	docker	cocos2d	django	hashicorp	emberjs	JuliaLang	dotnet	average
preciou@1	100.00%	97.37%	100.00%	100.00%	100.00%	97.37%	84. 21%	100.00%	97.37%	97.30%	100.00%	86.84%	69. 23%	60.53%	92.16%
preciou@2	100.00%	97.40%	100.00%	98.70%	92.21%	79. 22%	50.65%	73. 33%	64.47%	65.33%	62.67%	53.95%	41.03%	33.77%	72.34%
preciou@3	98. 28%	90.43%	100.00%	79.31%	70.69%	54.31%	37. 39%	48.67%	46. 49%	44.64%	41.96%	36.84%	27.97%	23.28%	57. 16%
preciou@4	94.84%	74.03%	100.00%	61.29%	54.84%	41.29%	29.22%	36. 42%	35. 53%	33.33%	32.00%	27. 45%	22. 29%	17.42%	47.14%
preciou@5	89.18%	62.18%	100.00%	50.00%	45. 36%	34.02%	23. 32%	29.63%	28.42%	26.74%	26.74%	21.99%	18.27%	14.51%	40.74%
recall@1	19.10%	24. 34%	8.93%	36.54%	36.89%	50.00%	51.61%	60.66%	64.91%	65.45%	71.15%	71.74%	64. 29%	76.67%	50.16%
recall@2	38.69%	49.34%	18.75%	73.08%	68.93%	82. 43%	62.90%	90.16%	85.96%	89.09%	90.38%	89.13%	76. 19%	86.67%	71.55%
recall@3	57. 29%	68. 42%	28. 57%	88.46%	79.61%	85. 14%	69.35%	90.16%	92. 98%	90.91%	90.38%	91.30%	78. 57%	90.00%	78.65%
recall@4	73.87%	75.00%	38.39%	91.35%	82. 52%	86. 49%	72.58%	90.16%	94. 74%	90.91%	92.31%	91.30%	83. 33%	90.00%	82.35%
recall@5	86. 93%	78.95%	48.21%	93.27%	85. 44%	89.19%	72.58%	91.80%	94. 74%	90.91%	96. 15%	91.30%	85. 71%	93.33%	85.61%
f1-score@1	32.07%	38.94%	16.40%	53. 52%	53.90%	66.07%	64.00%	75. 51%	77.89%	78. 26%	83.14%	78. 57%	66.67%	67.65%	64.96%
f1-score@2	55. 79%	65.50%	31.58%	83.98%	78.89%	80.79%	56. 11%	80.88%	73.68%	75. 38%	74.02%	67. 22%	53. 34%	48.60%	71.94%
f1-score@3	72. 38%	77.90%	44.44%	83.64%	74.89%	66. 32%	48.59%	63. 22%	61.99%	59.88%	57.31%	52. 50%	41.25%	36.99%	66. 20%
f1-score@4	83.05%	74. 51%	55. 48%	73.36%	65. 89%	55.90%	41.67%	51.88%	51.68%	48.78%	47.53%	42.21%	35. 17%	29.19%	59.96%
f1-score@5	88.04%	69.57%	65.06%	65.10%	59. 26%	49.25%	35. 30%	44.80%	43.72%	41.32%	41.84%	35. 44%	30. 12%	25.12%	55 . 21%
MRR	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
MAP@1	100.00%	96. 48%	100.00%	100.00%	100.00%	95.96%	82.71%	100.00%	97. 23%	95.08%	100.00%	85. 46%	58. 20%	55.38%	90.46%
MAP@2	100.00%	95.65%	100.00%	98.29%	91. 73%	76. 55%	47.44%	72.10%	61.67%	63. 19%	61.68%	50.95%	32. 35%	29.23%	70.06%
MAP@3	97. 72%	88.06%	100.00%	78.07%	68. 13%	51.89%	33. 28%	47.85%	43.17%	42.87%	41.30%	34. 43%	21.70%	19.68%	54.87%
MAP@4	93.84%	71.41%	100.00%	59.73%	52. 20%	39.13%	25. 26%	35. 81%	32.66%	32.01%	31.07%	25.65%	16.66%	14.73%	45.01%
MAP@5	87. 43%	59.08%	100.00%	48.36%	42.46%	31.64%	20.16%	28.78%	26. 13%	25.68%	25. 24%	20.55%	13.38%	11.92%	38.63%