**UCI的”急性炎症”数据集关联规则挖掘结果报告**

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程序运行打印结果如下：

yl@yl-HP-Compaq-Pro-6380-MT:~/develop/DataMining\_homework\_2/UCI$ python main.py

frozenset(['fever']) --> frozenset(['symptom\_6']) support: 0.384615384615 conf: 0.555555555556 lift: 0.902777777778

frozenset(['symptom\_6']) --> frozenset(['fever']) support: 0.384615384615 conf: 0.625 lift: 0.902777777778

frozenset(['symptom\_2']) --> frozenset(['symptom\_7']) support: 0.307692307692 conf: 0.666666666667 lift: 2.16666666667

frozenset(['symptom\_7']) --> frozenset(['symptom\_2']) support: 0.307692307692 conf: 1.0 lift: 2.16666666667

frozenset(['symptom\_6']) --> frozenset(['symptom\_4']) support: 0.461538461538 conf: 0.75 lift: 1.39285714286

frozenset(['symptom\_4']) --> frozenset(['symptom\_6']) support: 0.461538461538 conf: 0.857142857143 lift: 1.39285714286

frozenset(['symptom\_3']) --> frozenset(['symptom\_4']) support: 0.461538461538 conf: 0.666666666667 lift: 1.2380952381

frozenset(['symptom\_4']) --> frozenset(['symptom\_3']) support: 0.461538461538 conf: 0.857142857143 lift: 1.2380952381

frozenset(['fever']) --> frozenset(['symptom\_7']) support: 0.307692307692 conf: 0.444444444444 lift: 1.44444444444

frozenset(['symptom\_7']) --> frozenset(['fever']) support: 0.307692307692 conf: 1.0 lift: 1.44444444444

frozenset(['fever']) --> frozenset(['symptom\_4']) support: 0.384615384615 conf: 0.555555555556 lift: 1.03174603175

frozenset(['symptom\_4']) --> frozenset(['fever']) support: 0.384615384615 conf: 0.714285714286 lift: 1.03174603175

frozenset(['symptom\_3']) --> frozenset(['fever']) support: 0.461538461538 conf: 0.666666666667 lift: 0.962962962963

frozenset(['fever']) --> frozenset(['symptom\_3']) support: 0.461538461538 conf: 0.666666666667 lift: 0.962962962963

frozenset(['symptom\_3']) --> frozenset(['symptom\_6']) support: 0.615384615385 conf: 0.888888888889 lift: 1.44444444444

frozenset(['symptom\_6']) --> frozenset(['symptom\_3']) support: 0.615384615385 conf: 1.0 lift: 1.44444444444

frozenset(['symptom\_2']) --> frozenset(['fever']) support: 0.384615384615 conf: 0.833333333333 lift: 1.2037037037

frozenset(['fever']) --> frozenset(['symptom\_2']) support: 0.384615384615 conf: 0.555555555556 lift: 1.2037037037

frozenset(['symptom\_3']) --> frozenset(['symptom\_5']) support: 0.307692307692 conf: 0.444444444444 lift: 1.44444444444

frozenset(['symptom\_5']) --> frozenset(['symptom\_3']) support: 0.307692307692 conf: 1.0 lift: 1.44444444444

frozenset(['symptom\_3']) --> frozenset(['symptom\_4', 'fever']) support: 0.307692307692 conf: 0.444444444444 lift: 1.15555555556

frozenset(['fever']) --> frozenset(['symptom\_4', 'symptom\_3']) support: 0.307692307692 conf: 0.444444444444 lift: 0.962962962963

frozenset(['symptom\_4']) --> frozenset(['fever', 'symptom\_3']) support: 0.307692307692 conf: 0.571428571429 lift: 1.2380952381

frozenset(['fever']) --> frozenset(['symptom\_6', 'symptom\_3']) support: 0.384615384615 conf: 0.555555555556 lift: 0.902777777778

frozenset(['symptom\_3']) --> frozenset(['symptom\_6', 'fever']) support: 0.384615384615 conf: 0.555555555556 lift: 1.44444444444

frozenset(['symptom\_6']) --> frozenset(['fever', 'symptom\_3']) support: 0.384615384615 conf: 0.625 lift: 1.35416666667

frozenset(['symptom\_3']) --> frozenset(['symptom\_4', 'symptom\_6']) support: 0.461538461538 conf: 0.666666666667 lift: 1.44444444444

frozenset(['symptom\_6']) --> frozenset(['symptom\_4', 'symptom\_3']) support: 0.461538461538 conf: 0.75 lift: 1.625

frozenset(['symptom\_4']) --> frozenset(['symptom\_6', 'symptom\_3']) support: 0.461538461538 conf: 0.857142857143 lift: 1.39285714286

frozenset(['symptom\_2']) --> frozenset(['symptom\_7', 'fever']) support: 0.307692307692 conf: 0.666666666667 lift: 2.16666666667

frozenset(['fever']) --> frozenset(['symptom\_7', 'symptom\_2']) support: 0.307692307692 conf: 0.444444444444 lift: 1.44444444444

frozenset(['symptom\_7']) --> frozenset(['fever', 'symptom\_2']) support: 0.307692307692 conf: 1.0 lift: 2.6

frozenset(['fever']) --> frozenset(['symptom\_4', 'symptom\_6']) support: 0.307692307692 conf: 0.444444444444 lift: 0.962962962963

frozenset(['symptom\_6']) --> frozenset(['symptom\_4', 'fever']) support: 0.307692307692 conf: 0.5 lift: 1.3

frozenset(['symptom\_4']) --> frozenset(['symptom\_6', 'fever']) support: 0.307692307692 conf: 0.571428571429 lift: 1.48571428571

frozenset(['fever', 'symptom\_3']) --> frozenset(['symptom\_4', 'symptom\_6']) support: 0.307692307692 conf: 0.666666666667 lift: 1.44444444444

frozenset(['symptom\_6', 'fever']) --> frozenset(['symptom\_4', 'symptom\_3']) support: 0.307692307692 conf: 0.8 lift: 1.73333333333

frozenset(['symptom\_6', 'symptom\_3']) --> frozenset(['symptom\_4', 'fever']) support: 0.307692307692 conf: 0.5 lift: 1.3

frozenset(['symptom\_4', 'fever']) --> frozenset(['symptom\_6', 'symptom\_3']) support: 0.307692307692 conf: 0.8 lift: 1.3

frozenset(['symptom\_4', 'symptom\_3']) --> frozenset(['symptom\_6', 'fever']) support: 0.307692307692 conf: 0.666666666667 lift: 1.73333333333

frozenset(['symptom\_4', 'symptom\_6']) --> frozenset(['fever', 'symptom\_3']) support: 0.307692307692 conf: 0.666666666667 lift: 1.44444444444

frozenset(['fever']) --> frozenset(['symptom\_4', 'symptom\_6', 'symptom\_3']) support: 0.307692307692 conf: 0.444444444444 lift: 0.962962962963

frozenset(['symptom\_3']) --> frozenset(['symptom\_4', 'symptom\_6', 'fever']) support: 0.307692307692 conf: 0.444444444444 lift: 1.44444444444

frozenset(['symptom\_6']) --> frozenset(['symptom\_4', 'fever', 'symptom\_3']) support: 0.307692307692 conf: 0.5 lift: 1.625

frozenset(['symptom\_4']) --> frozenset(['symptom\_6', 'symptom\_3', 'fever']) support: 0.307692307692 conf: 0.571428571429 lift: 1.48571428571

由打印结果可以得出以下结论：

由conf（置信度）的大小可以判定，symptom5，symptom6和symptom7对该病症的关联性最强。