1 概述

选择8月份华中四个城市（成都市、武汉市、西安市、重庆市）早餐场景、午餐场景、下午茶场景订单数据（同一订单的商品作为一个样本），分析商品关联度，对强关联商品作绑定销售提升笔单价及GMV。

2 关联规则（支持度0.001，置信度0.05）

早餐场景（106802）

frozenset({'农夫山泉维他命水柠檬风味500ml'}) --> frozenset({'统一水趣多500ml'})

conf: **0.1145104895104895** 0.010711309607408032

frozenset({'康师傅香浓奶油味蛋酥卷'}) --> frozenset({'康师傅 妙芙蛋糕 奶油味96g'})

conf: **0.11328790459965929** 0.010992200593616283

frozenset({'雪碧 330ml'}) --> frozenset({'可口可乐1罐'})

conf: **0.10504201680672268** 0.015598812767431627

frozenset({'可口可乐1罐'}) --> frozenset({'雪碧 330ml'})

conf: 0.05379649554257608 **0.030457945937848188**

frozenset({'统一海之言柠檬饮料1瓶'}) --> frozenset({'统一水趣多500ml'})

conf: 0.05138339920948617 0.021319625853206372

frozenset({'统一海之言柠檬饮料1瓶'}) --> frozenset({'尖叫运动饮料纤维型柠檬味550ml'}) conf: 0.052261747913921824 0.021319625853206372

frozenset({'统一海之言柠檬饮料1瓶'}) --> frozenset({'统一水趣多500ml'})

conf: 0.05138339920948617 0.021319625853206372

frozenset({'三得利沁柠水'}) --> frozenset({'统一水趣多500ml'})

conf: 0.05344202898550725 0.02067357658492739

frozenset({'尖叫运动饮料纤维型柠檬味550ml'}) --> frozenset({'统一海之言柠檬饮料1瓶'}) conf: 0.068 0.016385307528814733

frozenset({'尖叫运动饮料纤维型柠檬味550ml'}) --> frozenset({'统一水趣多500ml'})

conf: 0.064 0.016385307528814733

午餐场景（117423）

**frozenset({'双汇泡面搭档葱香风味香肠45g'}) --> frozenset({'康师傅酸菜牛肉面'})**

**conf: 0.23303352412101389 0.01041524730889767**

frozenset({'咚咚蛋定挂板卤鸡蛋32g'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.20316622691292877 0.006455239133396921

frozenset({'双汇泡面搭档葱香风味香肠45g'}) --> frozenset({'康师傅泡椒牛肉面桶装'})

conf: 0.19051512673753063 0.01041524730889767

frozenset({'康师傅香浓奶油味蛋酥卷'}) --> frozenset({'康师傅 妙芙蛋糕 奶油味96g'})

conf: 0.1417910447761194 0.009129309170186674

frozenset({'康师傅 妙芙蛋糕 奶油味96g'}) --> frozenset({'康师傅香浓奶油味蛋酥卷'})

conf: 0.1457334611697028 0.00888234091838125

**frozenset({'康师傅泡椒牛肉面桶装'}) --> frozenset({'双汇泡面搭档葱香风味香肠45g'})**

**conf: 0.13193657984144957** 0.015039514920288868

frozenset({'康师傅酸菜牛肉面'}) --> frozenset({'双汇泡面搭档葱香风味香肠45g'})

conf: 0.1333645297145531 0.01819900531407549

frozenset({'康师傅红烧牛肉面106g'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.12486248624862487 0.015482354544215832

frozenset({'统一老坛酸菜牛肉面'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.11856091578086672 0.02083049461779534

frozenset({'双汇泡面搭档葱香风味香肠45g'}) --> frozenset({'康师傅麻辣牛肉干拌面'})

conf: 0.11529026982829108 0.01041524730889767

frozenset({'雪碧 330ml'}) --> frozenset({'可口可乐1罐'})

conf: 0.11372064276885042 **0.027558250442839625**

frozenset({'农夫山泉维他命水柠檬风味500ml'}) --> frozenset({'统一水趣多500ml'})

conf: 0.11071744906997343 0.00961472952718354

frozenset({'双汇玉米热狗肠'}) --> frozenset({'康师傅红烧牛肉面106g'})

conf: 0.059847086738729245 **0.03230174410682654**

frozenset({'统一海之言柠檬饮料1瓶'}) --> frozenset({'统一水趣多500ml'})

conf: 0.07024432809773123 0.019519008039242402

frozenset({'尖叫运动饮料纤维型柠檬味550ml'}) --> frozenset({'统一水趣多500ml'})

conf: 0.07755581668625147 0.01449448153699414

frozenset({'尖叫运动饮料纤维型柠檬味550ml'}) --> frozenset({'统一海之言柠檬饮料1瓶'}) conf: 0.09870740305522915 0.01449448153699414

frozenset({'统一海之言柠檬饮料1瓶'}) --> frozenset({'尖叫运动饮料纤维型柠檬味550ml'}) conf: 0.07329842931937174 0.019519008039242402

frozenset({'可口可乐(细长罐)330ml'}) --> frozenset({'雪碧(细长罐)330ml'})

conf: 0.05101465614430665 **0.03021528818640142**

frozenset({'雪碧(细长罐)330ml'}) --> frozenset({'可口可乐(细长罐)330ml'})

conf: 0.07381729200652529 0.02088159149747922

frozenset({'双汇玉米热狗肠'}) --> frozenset({'统一老坛酸菜牛肉面'})

conf: 0.07645663063538098 **0.03230174410682654**

frozenset({'康师傅麻辣牛肉干拌面'}) --> frozenset({'双汇泡面搭档葱香风味香肠45g'})

conf: 0.09294660514172709 0.012918994413407821

frozenset({'可口可乐1罐'}) --> frozenset({'雪碧 330ml'})

conf: 0.056842755637936365 **0.05513353317890721**

frozenset({'康师傅酸菜牛肉面'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.08282639213851192 0.01819900531407549

frozenset({'康师傅泡椒牛肉面桶装'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.07304643261608154 0.015039514920288868

下午茶场景（95383）

frozenset({'咚咚蛋定挂板卤鸡蛋32g'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.1994134897360704 0.0071500461293298664

frozenset({'奇爽Q爽豆干卤香味20g'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.13532513181019334 0.011930722133691184

frozenset({'雪碧 330ml'}) --> frozenset({'可口可乐1罐'})

conf: 0.12773224043715847 0.015348486119265285

frozenset({'康师傅 妙芙蛋糕 奶油味96g'}) --> frozenset({'康师傅香浓奶油味蛋酥卷'})

conf: 0.12467306015693112 0.012025077581145684

frozenset({'尖叫运动饮料纤维型柠檬味550ml'}) --> frozenset({'统一海之言柠檬饮料1瓶'}) conf: 0.10925306577480491 0.009404092929631805

frozenset({'统一海之言柠檬饮料1瓶'}) --> frozenset({'尖叫运动饮料纤维型柠檬味550ml'}) conf: 0.07480916030534351 0.013733959573932735

frozenset({'统一水趣多500ml'}) --> frozenset({'统一海之言柠檬饮料1瓶'})

conf: 0.050446663163426164 0.01995093516732366

frozenset({'统一海之言柠檬饮料1瓶'}) --> frozenset({'统一水趣多500ml'})

conf: 0.0732824427480916 0.013733959573932735

frozenset({'康师傅香浓奶油味蛋酥卷'}) --> frozenset({'康师傅 妙芙蛋糕 奶油味96g'})

conf: 0.09889349930843706 0.015159775224356286

frozenset({'卫龙大面筋106g'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.05276174773289365 **0.0254340350582907**

frozenset({'烤馍锅巴（烤馍片）'}) --> frozenset({'丽芝士纳宝帝奶酪味威化饼干58g'})

conf: 0.05188199389623601 0.020611423299505157

frozenset({'可口可乐1罐'}) --> frozenset({'雪碧 330ml'})

conf: 0.06292059219380888 **0.031158265537197014**

frozenset({'可口可乐(细长罐)330ml'}) --> frozenset({'雪碧(细长罐)330ml'})

conf: 0.06007067137809187 0.02076868237859599

frozenset({'雪碧(细长罐)330ml'}) --> frozenset({'可口可乐(细长罐)330ml'})

conf: 0.09414556962025315 0.013251698398054181

frozenset({'脆丁壳奥尔良鸡翅味点心面52g'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.0636015325670498 0.027363079761804916

frozenset({'Enaak点心面（烤鸡风味）30g'}) --> frozenset({'双汇玉米热狗肠'})

conf: 0.07474110760918505 0.023284827644049315