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57, 57, 60, 60, 62, 62, 63, 66, 69, 69, 72, 72, 75, 76, 78, 81, 83, 92, 95, 96, 113, 114,
117, 118, 118, 119, 125, 126, 128, 131, 140, 142, 146, 147, 148, 151, 154, 158, 159, 160,
175, 178, 186, 190, 191, 195, 199, 203, 204, 207, 211, 213, 214, 218, 221, 223, 226, 228,
228, 233, 235, 247, 250, 253, 253, 276, 278, 279, 281, 292, 292, 294, 302, 311, 311, 313,
313, 315, 316, 319, 321, 323, 324, 333, 333, 333, 338, 339, 339, 346, 346, 355, 362, 363,
363, 375, 378, 382, 386, 388, 390, 390, 396, 399, 400, 405, 408, 411, 412, 412, 422, 424,
425, 429, 437, 445, 446, 448, 450, 451, 451, 456, 460, 460, 461, 462, 463, 473, 476, 477,
480, 481, 482, 484, 490, 491, 494, 495, 497, 500, 501, 501, 506, 508, 508, 509, 517, 518,
518, 519, 521, 521, 523, 524, 527, 534, 538, 546, 548, 553, 555, 558, 558, 562, 565, 568,
568, 569, 571, 572, 573, 581, 583, 583, 590, 592, 600]
```

# In [39]: runfile('C:/Users/Aydin Rzayev/Desktop/associationMeasures.py', wdir='C:/Users/ Aydin Rzayev/Desktop')

These two frequent itemsets are counted:

```
Itemset of 17 and 23: [1, 15, 34, 38, 47, 49, 58, 60, 68, 70, 72, 95, 99, 119, 125, 148, 159, 160, 162, 178, 183, 193, 210, 217, 229, 230, 232, 259, 263, 265, 270, 272, 278, 296, 302, 337, 369, 384, 401, 403, 409, 440, 444, 445, 446, 454, 458, 473, 477, 501, 517, 523, 531, 541, 544, 555, 562, 572, 594]
```

```
Itemset of 17 and 25 : [28, 47, 53, 68, 69, 114, 115, 119, 124, 135, 143, 148, 160, 164, 183, 191, 204, 226, 229, 263, 278, 284, 291, 301, 314, 327, 338, 354, 364, 367, 379, 392, 398, 401, 409, 433, 440, 445, 446, 459, 461, 477, 487, 500, 501, 521, 522, 541, 555, 568, 571, 575, 584]
```

```
----- Support Measure support of 17 23 : 59 support of 17 25 : 53
```

	Confidence	Measure	
--	------------	---------	--

confidence of 17 23 : 0.31216931216931215 confidence of 17 25 : 0.2804232804232804

## ----- Lift Measure

lift of 17 23 : 0.879350175124823 lift of 17 25 : 0.849767516434183

### ----- Leverage Measure

#### ----- Jaccard Measure

jaccard of 17 23 : 0.17201166180758018 jaccard of 17 25 : 0.17664670658682635

#### ----- Conviction Measure

conviction of 17 23 : 0.9377307692307693 conviction of 17 25 : 0.9311029411764707

#### ----- Odds ratio Measure

odds ratio of 17 23 : 0.7573926073926074 odds ratio of 17 25 : 0.7149087221095335

In [40]: