Apriori Benchmark Testing

**For tests were used:**

BenchmarkDotNet v0.14.0, Windows 10 (10.0.19045.5608/22H2/2022Update)

AMD Ryzen 7 5800H with Radeon Graphics, 1 CPU, 16 logical and 8 physical cores

.NET SDK 8.0.404

[Host] : .NET 8.0.11 (8.0.1124.51707), X64 RyuJIT AVX2

DefaultJob : .NET 8.0.11 (8.0.1124.51707), X64 RyuJIT AVX2

**Legends:**

Mean : Arithmetic mean of all measurements

Error : Half of 99.9% confidence interval

StdDev : Standard deviation of all measurements

Median : Value separating the higher half of all measurements (50th percentile)

Gen0 : GC Generation 0 collects per 1000 operations

Gen1 : GC Generation 1 collects per 1000 operations

Gen2 : GC Generation 2 collects per 1000 operations

Allocated : Allocated memory per single operation (managed only, inclusive, 1KB = 1024B)

1 ms : 1 Millisecond (0.001 sec)

**Results:**

| Method | MaxAntecedentSize | RecurrenceSupportThreshold | PairsRecurrenceSupportThreshold | ConfidenceThreshold | InterestThreshold | Mean | Error | StdDev | Median | Gen0 | Gen1 | Gen2 | Allocated |

|------------------------- |------------------ |--------------------------- |-------------------------------- |-------------------- |------------------ |---------:|---------:|---------:|---------:|-----------:|--------:|--------:|----------:|

| GenerateAssociationRules | 2 | 0.01 | 0.01 | 0.2 | 0.1 | 21.60 ms | 0.426 ms | 0.612 ms | 21.27 ms | 9625.0000 | 62.5000 | 31.2500 | 77.21 MB |

| GenerateAssociationRules | 3 | 0.01 | 0.01 | 0.2 | 0.1 | 30.23 ms | 0.518 ms | 0.636 ms | 29.89 ms | 13500.0000 | 62.5000 | 31.2500 | 108.11 MB |

| GenerateAssociationRules | 4 | 0.01 | 0.01 | 0.2 | 0.1 | 34.37 ms | 0.497 ms | 0.441 ms | 34.49 ms | 15062.5000 | 62.5000 | - | 120.59 MB |

| GenerateAssociationRules | 5 | 0.01 | 0.01 | 0.2 | 0.1 | 33.33 ms | 0.595 ms | 0.557 ms | 33.49 ms | 15062.5000 | 62.5000 | - | 120.59 MB |