EMPIRICAL BINOMIAL DISTRIBUTION

* Expected frequencies of 0,1,2…
* Probability of success = Π
* Power/exponent = ^
* Multiplication operation = \*
* Repetitions = Reps

THEORITICAL EXPECTION BASED, Rep = 0

|  |  |  |  |
| --- | --- | --- | --- |
| Success | 2 | 1 | 0 |
| Expected  Relative  frequency | Π^2 = 0.55\*0.55 = 0.3025 | 2Π(1-Π) = 2\*0.55(0.45) = 0.495 | (1-Π)^2 = 0.45 \* 0.45 = 0.2025 |
| Expected  Relative  frequency | Rep\*Π = 0\*0.55 = 0 | Rep\*2\*Π(1-Π) = 0\*2\*0.55(0.45) = 0 | Rep\*(1-Π)^2 = 0\*(0.45\*0.45)^2 = 0 |

THEORITICAL EXPECTION BASED, Rep = 1

|  |  |  |  |
| --- | --- | --- | --- |
| Success | 2 | 1 | 0 |
| Expected  Relative  frequency | Π^2 = 0.55\*0.55 = 0.3025 | 2Π(1-Π) = 2\*0.55(0.45) = 0.495 | (1-Π)^2 = 0.45 \* 0.45 = 0.2025 |
| Expected  Relative  frequency | Rep\*Π = 1\*0.55 = 0.3025 | Rep\*2\*Π(1-Π) = 1\*2\*0.55(0.45) = 0.495 | Rep\*(1-Π)^2 = 0\*(0.45\*0.45)^2 = 0.2025 |

|  |  |  |  |
| --- | --- | --- | --- |
| Success | 2 | 1 | 0 |
| Expected  Relative  frequency | Π^2 = 0.55\*0.55 = 0.3025 | 2Π(1-Π) = 2\*0.55(0.45) = 0.495 | (1-Π)^2 = 0.45 \* 0.45 = 0.2025 |
| Expected  Relative  frequency | Rep\*Π = 2\*0.55 = 0.605 | Rep\*2\*Π(1-Π) = 2\*2\*0.55(0.45) = 0.99 | Rep\*(1-Π)^2 = 2\*(0.45\*0.45)^2 = 0.405 |

THEORITICAL EXPECTION BASED, Rep = 2

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: success

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 10 | **Sum Weights** | 10 |
| **Mean** | 0.1 | **Sum Observations** | 1 |
| **Std Deviation** | 0.31622777 | **Variance** | 0.1 |
| **Skewness** | 3.16227766 | **Kurtosis** | 10 |
| **Uncorrected SS** | 1 | **Corrected SS** | 0.9 |
| **Coeff Variation** | 316.227766 | **Std Error Mean** | 0.1 |

| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 0.100000 | **Std Deviation** | 0.31623 |
| **Median** | 0.000000 | **Variance** | 0.10000 |
| **Mode** | 0.000000 | **Range** | 1.00000 |
|  |  | **Interquartile Range** | 0 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 1 | **Pr > |t|** | 0.3434 |
| **Sign** | **M** | 0.5 | **Pr >= |M|** | 1.0000 |
| **Signed Rank** | **S** | 0.5 | **Pr >= |S|** | 1.0000 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 1.0 |
| **99%** | 1.0 |
| **95%** | 1.0 |
| **90%** | 0.5 |
| **75% Q3** | 0.0 |
| **50% Median** | 0.0 |
| **25% Q1** | 0.0 |
| **10%** | 0.0 |
| **5%** | 0.0 |
| **1%** | 0.0 |
| **0% Min** | 0.0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 10 | 0 | 7 |
| 0 | 9 | 0 | 8 |
| 0 | 8 | 0 | 9 |
| 0 | 7 | 0 | 10 |
| 0 | 5 | 1 | 6 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

| **Obs** | **seed** | **i** | **x** |
| --- | --- | --- | --- |
| **1** | 2766 | 1 | 0.60647 |
| **2** | 2766 | 2 | 0.26539 |
| **3** | 2766 | 3 | 0.91403 |
| **4** | 2766 | 4 | 0.49665 |
| **5** | 2766 | 5 | 0.15273 |
| **6** | 2766 | 6 | 0.02115 |
| **7** | 2766 | 7 | 0.88039 |
| **8** | 2766 | 8 | 0.65931 |
| **9** | 2766 | 9 | 0.73028 |
| **10** | 2766 | 10 | 0.12308 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: success

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 10 | **Sum Weights** | 10 |
| **Mean** | 0.1 | **Sum Observations** | 1 |
| **Std Deviation** | 0.31622777 | **Variance** | 0.1 |
| **Skewness** | 3.16227766 | **Kurtosis** | 10 |
| **Uncorrected SS** | 1 | **Corrected SS** | 0.9 |
| **Coeff Variation** | 316.227766 | **Std Error Mean** | 0.1 |

| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 0.100000 | **Std Deviation** | 0.31623 |
| **Median** | 0.000000 | **Variance** | 0.10000 |
| **Mode** | 0.000000 | **Range** | 1.00000 |
|  |  | **Interquartile Range** | 0 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 1 | **Pr > |t|** | 0.3434 |
| **Sign** | **M** | 0.5 | **Pr >= |M|** | 1.0000 |
| **Signed Rank** | **S** | 0.5 | **Pr >= |S|** | 1.0000 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 1.0 |
| **99%** | 1.0 |
| **95%** | 1.0 |
| **90%** | 0.5 |
| **75% Q3** | 0.0 |
| **50% Median** | 0.0 |
| **25% Q1** | 0.0 |
| **10%** | 0.0 |
| **5%** | 0.0 |
| **1%** | 0.0 |
| **0% Min** | 0.0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 10 | 0 | 7 |
| 0 | 9 | 0 | 8 |
| 0 | 8 | 0 | 9 |
| 0 | 7 | 0 | 10 |
| 0 | 5 | 1 | 6 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: females

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 10000 | **Sum Weights** | 10000 |
| **Mean** | 1.09 | **Sum Observations** | 10900 |
| **Std Deviation** | 0.70593897 | **Variance** | 0.49834983 |
| **Skewness** | -0.128718 | **Kurtosis** | -0.9926131 |
| **Uncorrected SS** | 16864 | **Corrected SS** | 4983 |
| **Coeff Variation** | 64.7650435 | **Std Error Mean** | 0.00705939 |

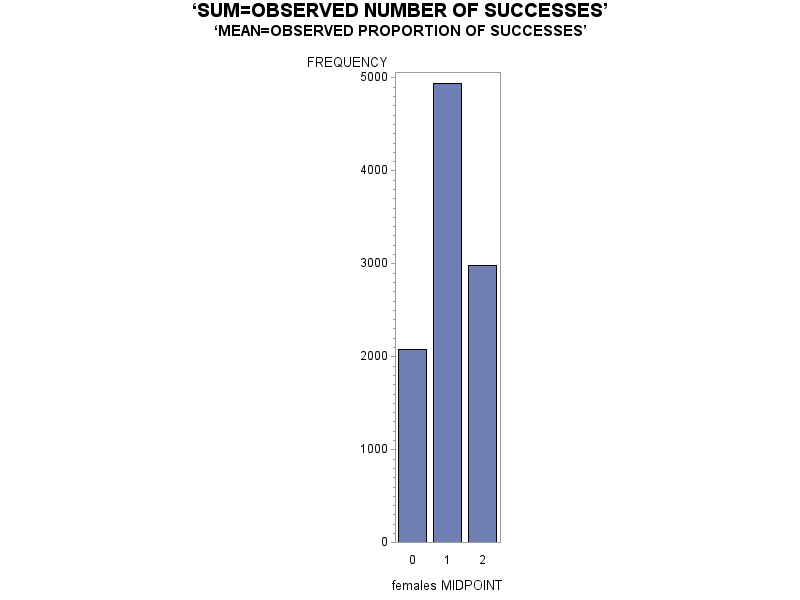
| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 1.090000 | **Std Deviation** | 0.70594 |
| **Median** | 1.000000 | **Variance** | 0.49835 |
| **Mode** | 1.000000 | **Range** | 2.00000 |
|  |  | **Interquartile Range** | 1.00000 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 154.4043 | **Pr > |t|** | <.0001 |
| **Sign** | **M** | 3959 | **Pr >= |M|** | <.0001 |
| **Signed Rank** | **S** | 15675661 | **Pr >= |S|** | <.0001 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 2 |
| **99%** | 2 |
| **95%** | 2 |
| **90%** | 2 |
| **75% Q3** | 2 |
| **50% Median** | 1 |
| **25% Q1** | 1 |
| **10%** | 0 |
| **5%** | 0 |
| **1%** | 0 |
| **0% Min** | 0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 9995 | 2 | 9990 |
| 0 | 9989 | 2 | 9992 |
| 0 | 9981 | 2 | 9994 |
| 0 | 9978 | 2 | 9996 |
| 0 | 9973 | 2 | 9998 |

| **Frequency Counts** | | | |
| --- | --- | --- | --- |
| **Value** | **Count** | **Percents** | |
| **Cell** | **Cum** |
| 0 | 2082 | 20.8 | 20.8 |
| 1 | 4936 | 49.4 | 70.2 |
| 2 | 2982 | 29.8 | 100.0 |



|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

| **Obs** | **seed** | **i** | **x** |
| --- | --- | --- | --- |
| **1** | 2766 | 1 | 0.60647 |
| **2** | 2766 | 2 | 0.26539 |
| **3** | 2766 | 3 | 0.91403 |
| **4** | 2766 | 4 | 0.49665 |
| **5** | 2766 | 5 | 0.15273 |
| **6** | 2766 | 6 | 0.02115 |
| **7** | 2766 | 7 | 0.88039 |
| **8** | 2766 | 8 | 0.65931 |
| **9** | 2766 | 9 | 0.73028 |
| **10** | 2766 | 10 | 0.12308 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: success

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 10 | **Sum Weights** | 10 |
| **Mean** | 0.1 | **Sum Observations** | 1 |
| **Std Deviation** | 0.31622777 | **Variance** | 0.1 |
| **Skewness** | 3.16227766 | **Kurtosis** | 10 |
| **Uncorrected SS** | 1 | **Corrected SS** | 0.9 |
| **Coeff Variation** | 316.227766 | **Std Error Mean** | 0.1 |

| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 0.100000 | **Std Deviation** | 0.31623 |
| **Median** | 0.000000 | **Variance** | 0.10000 |
| **Mode** | 0.000000 | **Range** | 1.00000 |
|  |  | **Interquartile Range** | 0 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 1 | **Pr > |t|** | 0.3434 |
| **Sign** | **M** | 0.5 | **Pr >= |M|** | 1.0000 |
| **Signed Rank** | **S** | 0.5 | **Pr >= |S|** | 1.0000 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 1.0 |
| **99%** | 1.0 |
| **95%** | 1.0 |
| **90%** | 0.5 |
| **75% Q3** | 0.0 |
| **50% Median** | 0.0 |
| **25% Q1** | 0.0 |
| **10%** | 0.0 |
| **5%** | 0.0 |
| **1%** | 0.0 |
| **0% Min** | 0.0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 10 | 0 | 7 |
| 0 | 9 | 0 | 8 |
| 0 | 8 | 0 | 9 |
| 0 | 7 | 0 | 10 |
| 0 | 5 | 1 | 6 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: females

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 1000 | **Sum Weights** | 1000 |
| **Mean** | 1.086 | **Sum Observations** | 1086 |
| **Std Deviation** | 0.70788778 | **Variance** | 0.50110511 |
| **Skewness** | -0.1238239 | **Kurtosis** | -1.0006536 |
| **Uncorrected SS** | 1680 | **Corrected SS** | 500.604 |
| **Coeff Variation** | 65.1830366 | **Std Error Mean** | 0.02238538 |

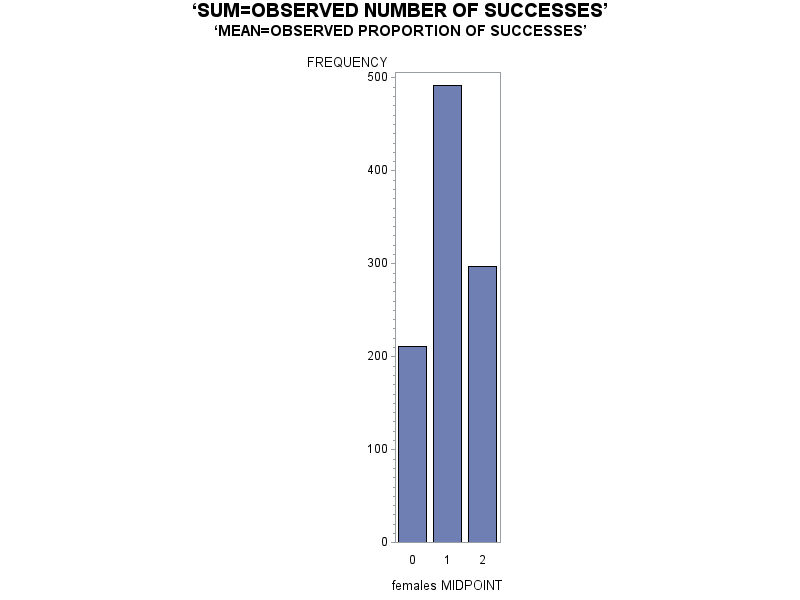
| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 1.086000 | **Std Deviation** | 0.70789 |
| **Median** | 1.000000 | **Variance** | 0.50111 |
| **Mode** | 1.000000 | **Range** | 2.00000 |
|  |  | **Interquartile Range** | 1.00000 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 48.51381 | **Pr > |t|** | <.0001 |
| **Sign** | **M** | 394.5 | **Pr >= |M|** | <.0001 |
| **Signed Rank** | **S** | 155827.5 | **Pr >= |S|** | <.0001 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 2 |
| **99%** | 2 |
| **95%** | 2 |
| **90%** | 2 |
| **75% Q3** | 2 |
| **50% Median** | 1 |
| **25% Q1** | 1 |
| **10%** | 0 |
| **5%** | 0 |
| **1%** | 0 |
| **0% Min** | 0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 995 | 2 | 978 |
| 0 | 994 | 2 | 984 |
| 0 | 988 | 2 | 989 |
| 0 | 983 | 2 | 996 |
| 0 | 982 | 2 | 997 |

| **Frequency Counts** | | | |
| --- | --- | --- | --- |
| **Value** | **Count** | **Percents** | |
| **Cell** | **Cum** |
| 0 | 211 | 21.1 | 21.1 |
| 1 | 492 | 49.2 | 70.3 |
| 2 | 297 | 29.7 | 100.0 |



|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: females

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 1000 | **Sum Weights** | 1000 |
| **Mean** | 1.101 | **Sum Observations** | 1101 |
| **Std Deviation** | 0.69805894 | **Variance** | 0.48728629 |
| **Skewness** | -0.1401519 | **Kurtosis** | -0.9465886 |
| **Uncorrected SS** | 1699 | **Corrected SS** | 486.799 |
| **Coeff Variation** | 63.4022654 | **Std Error Mean** | 0.02207456 |

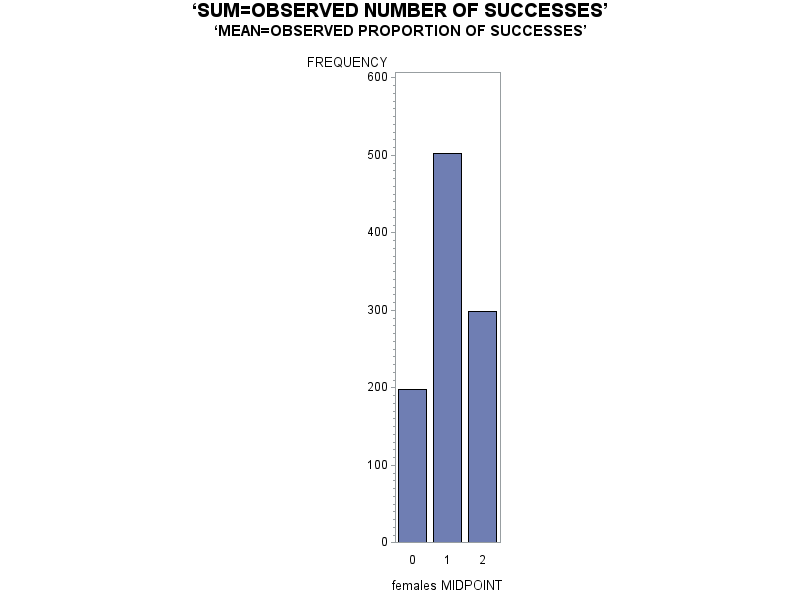
| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 1.101000 | **Std Deviation** | 0.69806 |
| **Median** | 1.000000 | **Variance** | 0.48729 |
| **Mode** | 1.000000 | **Range** | 2.00000 |
|  |  | **Interquartile Range** | 1.00000 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 49.87641 | **Pr > |t|** | <.0001 |
| **Sign** | **M** | 401 | **Pr >= |M|** | <.0001 |
| **Signed Rank** | **S** | 161001.5 | **Pr >= |S|** | <.0001 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 2 |
| **99%** | 2 |
| **95%** | 2 |
| **90%** | 2 |
| **75% Q3** | 2 |
| **50% Median** | 1 |
| **25% Q1** | 1 |
| **10%** | 0 |
| **5%** | 0 |
| **1%** | 0 |
| **0% Min** | 0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 1000 | 2 | 984 |
| 0 | 999 | 2 | 991 |
| 0 | 988 | 2 | 992 |
| 0 | 987 | 2 | 996 |
| 0 | 979 | 2 | 998 |

| **Frequency Counts** | | | |
| --- | --- | --- | --- |
| **Value** | **Count** | **Percents** | |
| **Cell** | **Cum** |
| 0 | 198 | 19.8 | 19.8 |
| 1 | 503 | 50.3 | 70.1 |
| 2 | 299 | 29.9 | 100.0 |



|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

| **Obs** | **seed** | **i** | **x** |
| --- | --- | --- | --- |
| **1** | 2766 | 1 | 0.60647 |
| **2** | 2766 | 2 | 0.26539 |
| **3** | 2766 | 3 | 0.91403 |
| **4** | 2766 | 4 | 0.49665 |
| **5** | 2766 | 5 | 0.15273 |
| **6** | 2766 | 6 | 0.02115 |
| **7** | 2766 | 7 | 0.88039 |
| **8** | 2766 | 8 | 0.65931 |
| **9** | 2766 | 9 | 0.73028 |
| **10** | 2766 | 10 | 0.12308 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: success

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 10 | **Sum Weights** | 10 |
| **Mean** | 0.1 | **Sum Observations** | 1 |
| **Std Deviation** | 0.31622777 | **Variance** | 0.1 |
| **Skewness** | 3.16227766 | **Kurtosis** | 10 |
| **Uncorrected SS** | 1 | **Corrected SS** | 0.9 |
| **Coeff Variation** | 316.227766 | **Std Error Mean** | 0.1 |

| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 0.100000 | **Std Deviation** | 0.31623 |
| **Median** | 0.000000 | **Variance** | 0.10000 |
| **Mode** | 0.000000 | **Range** | 1.00000 |
|  |  | **Interquartile Range** | 0 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 1 | **Pr > |t|** | 0.3434 |
| **Sign** | **M** | 0.5 | **Pr >= |M|** | 1.0000 |
| **Signed Rank** | **S** | 0.5 | **Pr >= |S|** | 1.0000 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 1.0 |
| **99%** | 1.0 |
| **95%** | 1.0 |
| **90%** | 0.5 |
| **75% Q3** | 0.0 |
| **50% Median** | 0.0 |
| **25% Q1** | 0.0 |
| **10%** | 0.0 |
| **5%** | 0.0 |
| **1%** | 0.0 |
| **0% Min** | 0.0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 10 | 0 | 7 |
| 0 | 9 | 0 | 8 |
| 0 | 8 | 0 | 9 |
| 0 | 7 | 0 | 10 |
| 0 | 5 | 1 | 6 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: females

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 1000 | **Sum Weights** | 1000 |
| **Mean** | 1.086 | **Sum Observations** | 1086 |
| **Std Deviation** | 0.70788778 | **Variance** | 0.50110511 |
| **Skewness** | -0.1238239 | **Kurtosis** | -1.0006536 |
| **Uncorrected SS** | 1680 | **Corrected SS** | 500.604 |
| **Coeff Variation** | 65.1830366 | **Std Error Mean** | 0.02238538 |

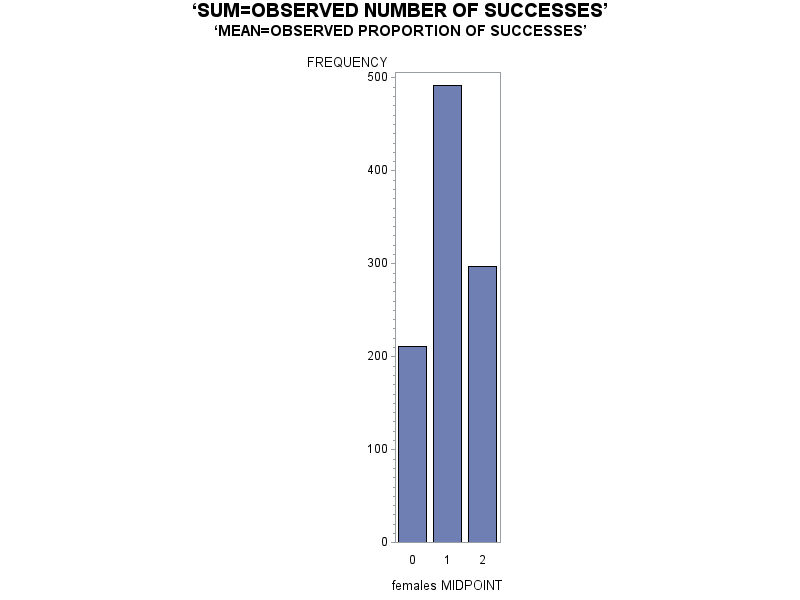
| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 1.086000 | **Std Deviation** | 0.70789 |
| **Median** | 1.000000 | **Variance** | 0.50111 |
| **Mode** | 1.000000 | **Range** | 2.00000 |
|  |  | **Interquartile Range** | 1.00000 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 48.51381 | **Pr > |t|** | <.0001 |
| **Sign** | **M** | 394.5 | **Pr >= |M|** | <.0001 |
| **Signed Rank** | **S** | 155827.5 | **Pr >= |S|** | <.0001 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 2 |
| **99%** | 2 |
| **95%** | 2 |
| **90%** | 2 |
| **75% Q3** | 2 |
| **50% Median** | 1 |
| **25% Q1** | 1 |
| **10%** | 0 |
| **5%** | 0 |
| **1%** | 0 |
| **0% Min** | 0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 995 | 2 | 978 |
| 0 | 994 | 2 | 984 |
| 0 | 988 | 2 | 989 |
| 0 | 983 | 2 | 996 |
| 0 | 982 | 2 | 997 |

| **Frequency Counts** | | | |
| --- | --- | --- | --- |
| **Value** | **Count** | **Percents** | |
| **Cell** | **Cum** |
| 0 | 211 | 21.1 | 21.1 |
| 1 | 492 | 49.2 | 70.3 |
| 2 | 297 | 29.7 | 100.0 |



|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: females

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 1000 | **Sum Weights** | 1000 |
| **Mean** | 1.101 | **Sum Observations** | 1101 |
| **Std Deviation** | 0.69805894 | **Variance** | 0.48728629 |
| **Skewness** | -0.1401519 | **Kurtosis** | -0.9465886 |
| **Uncorrected SS** | 1699 | **Corrected SS** | 486.799 |
| **Coeff Variation** | 63.4022654 | **Std Error Mean** | 0.02207456 |

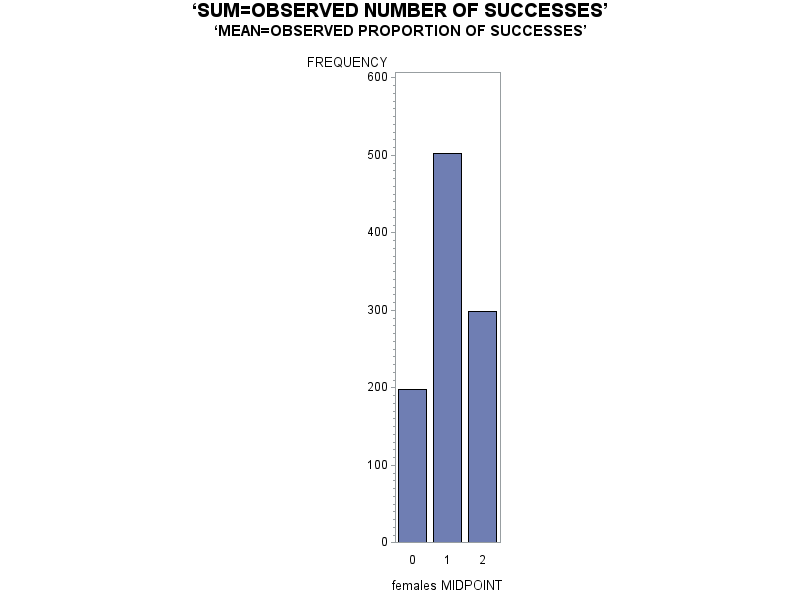
| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 1.101000 | **Std Deviation** | 0.69806 |
| **Median** | 1.000000 | **Variance** | 0.48729 |
| **Mode** | 1.000000 | **Range** | 2.00000 |
|  |  | **Interquartile Range** | 1.00000 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 49.87641 | **Pr > |t|** | <.0001 |
| **Sign** | **M** | 401 | **Pr >= |M|** | <.0001 |
| **Signed Rank** | **S** | 161001.5 | **Pr >= |S|** | <.0001 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 2 |
| **99%** | 2 |
| **95%** | 2 |
| **90%** | 2 |
| **75% Q3** | 2 |
| **50% Median** | 1 |
| **25% Q1** | 1 |
| **10%** | 0 |
| **5%** | 0 |
| **1%** | 0 |
| **0% Min** | 0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 1000 | 2 | 984 |
| 0 | 999 | 2 | 991 |
| 0 | 988 | 2 | 992 |
| 0 | 987 | 2 | 996 |
| 0 | 979 | 2 | 998 |

| **Frequency Counts** | | | |
| --- | --- | --- | --- |
| **Value** | **Count** | **Percents** | |
| **Cell** | **Cum** |
| 0 | 198 | 19.8 | 19.8 |
| 1 | 503 | 50.3 | 70.1 |
| 2 | 299 | 29.9 | 100.0 |



|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

| **Obs** | **seed** | **i** | **x** |
| --- | --- | --- | --- |
| **1** | 2766 | 1 | 0.60647 |
| **2** | 2766 | 2 | 0.26539 |
| **3** | 2766 | 3 | 0.91403 |
| **4** | 2766 | 4 | 0.49665 |
| **5** | 2766 | 5 | 0.15273 |
| **6** | 2766 | 6 | 0.02115 |
| **7** | 2766 | 7 | 0.88039 |
| **8** | 2766 | 8 | 0.65931 |
| **9** | 2766 | 9 | 0.73028 |
| **10** | 2766 | 10 | 0.12308 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: success

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 10 | **Sum Weights** | 10 |
| **Mean** | 0.1 | **Sum Observations** | 1 |
| **Std Deviation** | 0.31622777 | **Variance** | 0.1 |
| **Skewness** | 3.16227766 | **Kurtosis** | 10 |
| **Uncorrected SS** | 1 | **Corrected SS** | 0.9 |
| **Coeff Variation** | 316.227766 | **Std Error Mean** | 0.1 |

| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 0.100000 | **Std Deviation** | 0.31623 |
| **Median** | 0.000000 | **Variance** | 0.10000 |
| **Mode** | 0.000000 | **Range** | 1.00000 |
|  |  | **Interquartile Range** | 0 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 1 | **Pr > |t|** | 0.3434 |
| **Sign** | **M** | 0.5 | **Pr >= |M|** | 1.0000 |
| **Signed Rank** | **S** | 0.5 | **Pr >= |S|** | 1.0000 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 1.0 |
| **99%** | 1.0 |
| **95%** | 1.0 |
| **90%** | 0.5 |
| **75% Q3** | 0.0 |
| **50% Median** | 0.0 |
| **25% Q1** | 0.0 |
| **10%** | 0.0 |
| **5%** | 0.0 |
| **1%** | 0.0 |
| **0% Min** | 0.0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 10 | 0 | 7 |
| 0 | 9 | 0 | 8 |
| 0 | 8 | 0 | 9 |
| 0 | 7 | 0 | 10 |
| 0 | 5 | 1 | 6 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: females

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 1000 | **Sum Weights** | 1000 |
| **Mean** | 1.086 | **Sum Observations** | 1086 |
| **Std Deviation** | 0.70788778 | **Variance** | 0.50110511 |
| **Skewness** | -0.1238239 | **Kurtosis** | -1.0006536 |
| **Uncorrected SS** | 1680 | **Corrected SS** | 500.604 |
| **Coeff Variation** | 65.1830366 | **Std Error Mean** | 0.02238538 |

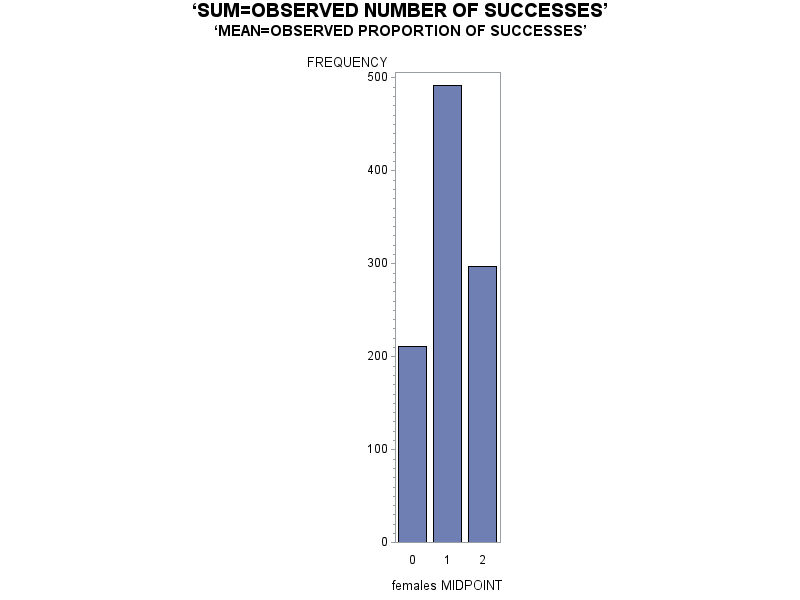
| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 1.086000 | **Std Deviation** | 0.70789 |
| **Median** | 1.000000 | **Variance** | 0.50111 |
| **Mode** | 1.000000 | **Range** | 2.00000 |
|  |  | **Interquartile Range** | 1.00000 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 48.51381 | **Pr > |t|** | <.0001 |
| **Sign** | **M** | 394.5 | **Pr >= |M|** | <.0001 |
| **Signed Rank** | **S** | 155827.5 | **Pr >= |S|** | <.0001 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 2 |
| **99%** | 2 |
| **95%** | 2 |
| **90%** | 2 |
| **75% Q3** | 2 |
| **50% Median** | 1 |
| **25% Q1** | 1 |
| **10%** | 0 |
| **5%** | 0 |
| **1%** | 0 |
| **0% Min** | 0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 995 | 2 | 978 |
| 0 | 994 | 2 | 984 |
| 0 | 988 | 2 | 989 |
| 0 | 983 | 2 | 996 |
| 0 | 982 | 2 | 997 |

| **Frequency Counts** | | | |
| --- | --- | --- | --- |
| **Value** | **Count** | **Percents** | |
| **Cell** | **Cum** |
| 0 | 211 | 21.1 | 21.1 |
| 1 | 492 | 49.2 | 70.3 |
| 2 | 297 | 29.7 | 100.0 |



|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The UNIVARIATE Procedure

Variable: females

| **Moments** | | | |
| --- | --- | --- | --- |
| **N** | 1000 | **Sum Weights** | 1000 |
| **Mean** | 1.101 | **Sum Observations** | 1101 |
| **Std Deviation** | 0.69805894 | **Variance** | 0.48728629 |
| **Skewness** | -0.1401519 | **Kurtosis** | -0.9465886 |
| **Uncorrected SS** | 1699 | **Corrected SS** | 486.799 |
| **Coeff Variation** | 63.4022654 | **Std Error Mean** | 0.02207456 |

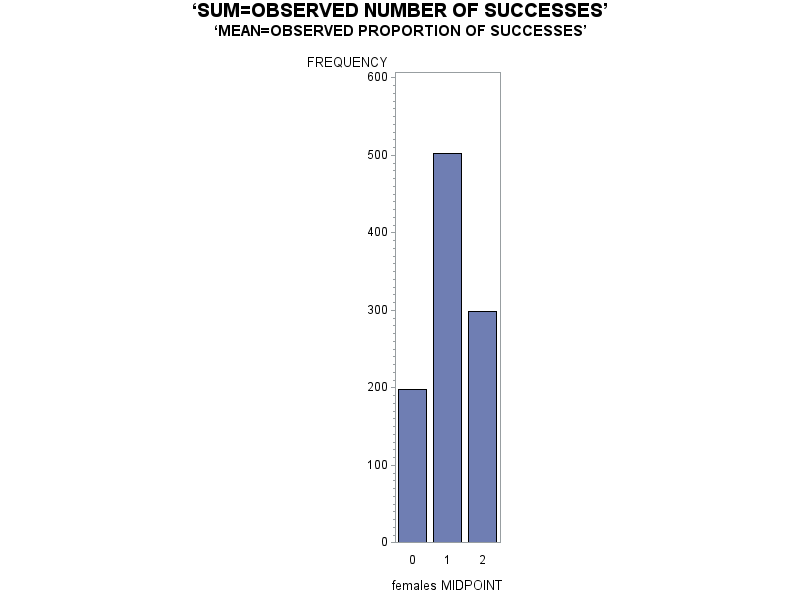
| **Basic Statistical Measures** | | | |
| --- | --- | --- | --- |
| **Location** | | **Variability** | |
| **Mean** | 1.101000 | **Std Deviation** | 0.69806 |
| **Median** | 1.000000 | **Variance** | 0.48729 |
| **Mode** | 1.000000 | **Range** | 2.00000 |
|  |  | **Interquartile Range** | 1.00000 |

| **Tests for Location: Mu0=0** | | | | |
| --- | --- | --- | --- | --- |
| **Test** | **Statistic** | | **p Value** | |
| **Student's t** | **t** | 49.87641 | **Pr > |t|** | <.0001 |
| **Sign** | **M** | 401 | **Pr >= |M|** | <.0001 |
| **Signed Rank** | **S** | 161001.5 | **Pr >= |S|** | <.0001 |

| **Quantiles (Definition 5)** | |
| --- | --- |
| **Level** | **Quantile** |
| **100% Max** | 2 |
| **99%** | 2 |
| **95%** | 2 |
| **90%** | 2 |
| **75% Q3** | 2 |
| **50% Median** | 1 |
| **25% Q1** | 1 |
| **10%** | 0 |
| **5%** | 0 |
| **1%** | 0 |
| **0% Min** | 0 |

| **Extreme Observations** | | | |
| --- | --- | --- | --- |
| **Lowest** | | **Highest** | |
| **Value** | **Obs** | **Value** | **Obs** |
| 0 | 1000 | 2 | 984 |
| 0 | 999 | 2 | 991 |
| 0 | 988 | 2 | 992 |
| 0 | 987 | 2 | 996 |
| 0 | 979 | 2 | 998 |

| **Frequency Counts** | | | |
| --- | --- | --- | --- |
| **Value** | **Count** | **Percents** | |
| **Cell** | **Cum** |
| 0 | 198 | 19.8 | 19.8 |
| 1 | 503 | 50.3 | 70.1 |
| 2 | 299 | 29.9 | 100.0 |



|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

| **Obs** | **Ns** | **j** | **n** | **mean** | **sd** |
| --- | --- | --- | --- | --- | --- |
| **1** | 4 | 1 | 4 | -0.27930 | 1.37716 |
| **2** | 4 | 2 | 4 | 0.47397 | 0.82534 |
| **3** | 4 | 3 | 4 | 0.44524 | 1.34056 |
| **4** | 4 | 4 | 4 | 1.09960 | 0.74063 |
| **5** | 4 | 5 | 4 | 0.40762 | 0.93786 |
| **6** | 4 | 6 | 4 | -0.30601 | 0.86153 |
| **7** | 4 | 7 | 4 | -1.60721 | 1.57665 |
| **8** | 4 | 8 | 4 | -0.32201 | 1.82995 |
| **9** | 4 | 9 | 4 | -0.35776 | 0.65950 |
| **10** | 4 | 10 | 4 | -0.37137 | 0.82716 |
| **11** | 4 | 11 | 4 | 0.09705 | 0.88223 |
| **12** | 4 | 12 | 4 | -0.02233 | 1.55069 |
| **13** | 4 | 13 | 4 | 0.22996 | 1.24941 |
| **14** | 4 | 14 | 4 | 0.45166 | 1.52133 |
| **15** | 4 | 15 | 4 | -0.44371 | 1.58975 |
| **16** | 4 | 16 | 4 | 0.66666 | 1.30152 |
| **17** | 4 | 17 | 4 | -0.14795 | 1.99736 |
| **18** | 4 | 18 | 4 | -0.34187 | 1.53387 |
| **19** | 4 | 19 | 4 | -0.17710 | 0.58351 |
| **20** | 4 | 20 | 4 | -0.04097 | 1.06686 |
| **21** | 4 | 21 | 4 | -0.54223 | 0.66679 |
| **22** | 4 | 22 | 4 | 0.48514 | 1.25348 |
| **23** | 4 | 23 | 4 | 0.01727 | 1.21927 |
| **24** | 4 | 24 | 4 | 0.23178 | 0.47473 |
| **25** | 4 | 25 | 4 | -0.11179 | 1.83640 |
| **26** | 4 | 26 | 4 | -0.18934 | 0.95002 |
| **27** | 4 | 27 | 4 | -0.30927 | 1.79601 |
| **28** | 4 | 28 | 4 | 0.34881 | 1.74687 |
| **29** | 4 | 29 | 4 | 0.48536 | 0.47940 |
| **30** | 4 | 30 | 4 | -0.28255 | 1.67127 |
| **31** | 4 | 31 | 4 | 0.16856 | 0.62519 |
| **32** | 4 | 32 | 4 | 0.74698 | 0.47241 |
| **33** | 4 | 33 | 4 | -0.00847 | 0.95075 |
| **34** | 4 | 34 | 4 | 0.26634 | 0.54113 |
| **35** | 4 | 35 | 4 | -0.41466 | 0.76541 |
| **36** | 4 | 36 | 4 | 0.14653 | 1.23584 |
| **37** | 4 | 37 | 4 | -0.54410 | 1.30695 |
| **38** | 4 | 38 | 4 | 0.29654 | 1.60466 |
| **39** | 4 | 39 | 4 | 0.71373 | 0.50673 |
| **40** | 4 | 40 | 4 | -0.81181 | 0.75708 |
| **41** | 4 | 41 | 4 | 0.66183 | 0.94488 |
| **42** | 4 | 42 | 4 | -0.14404 | 0.85455 |
| **43** | 4 | 43 | 4 | -0.47743 | 0.87590 |
| **44** | 4 | 44 | 4 | 0.10406 | 2.07061 |
| **45** | 4 | 45 | 4 | 0.73170 | 1.63415 |
| **46** | 4 | 46 | 4 | 0.10278 | 0.43125 |
| **47** | 4 | 47 | 4 | -0.88177 | 0.17961 |
| **48** | 4 | 48 | 4 | -0.07806 | 0.37419 |
| **49** | 4 | 49 | 4 | 0.32300 | 0.84404 |
| **50** | 4 | 50 | 4 | 0.65688 | 1.88804 |
| **51** | 4 | 51 | 4 | -0.12107 | 0.62384 |
| **52** | 4 | 52 | 4 | -0.40342 | 0.86863 |
| **53** | 4 | 53 | 4 | -0.58569 | 1.37165 |
| **54** | 4 | 54 | 4 | -0.58359 | 1.62714 |
| **55** | 4 | 55 | 4 | 0.42250 | 0.36269 |
| **56** | 4 | 56 | 4 | -0.35307 | 0.76736 |
| **57** | 4 | 57 | 4 | -0.06514 | 0.80993 |
| **58** | 4 | 58 | 4 | 0.17487 | 0.75622 |
| **59** | 4 | 59 | 4 | 0.00523 | 1.15301 |
| **60** | 4 | 60 | 4 | -0.23244 | 0.90798 |
| **61** | 4 | 61 | 4 | -0.61523 | 1.32395 |
| **62** | 4 | 62 | 4 | 0.14307 | 0.67703 |
| **63** | 4 | 63 | 4 | 0.38266 | 1.06410 |
| **64** | 4 | 64 | 4 | -0.10253 | 1.01383 |
| **65** | 4 | 65 | 4 | 0.26223 | 0.87700 |
| **66** | 4 | 66 | 4 | 0.07409 | 1.15904 |
| **67** | 4 | 67 | 4 | -0.30482 | 0.80346 |
| **68** | 4 | 68 | 4 | 0.30664 | 1.59765 |
| **69** | 4 | 69 | 4 | -0.45235 | 0.70959 |
| **70** | 4 | 70 | 4 | 0.58116 | 0.61984 |
| **71** | 4 | 71 | 4 | 0.41494 | 0.96803 |
| **72** | 4 | 72 | 4 | 0.58145 | 0.34639 |
| **73** | 4 | 73 | 4 | 0.06254 | 1.03167 |
| **74** | 4 | 74 | 4 | 0.21103 | 1.30576 |
| **75** | 4 | 75 | 4 | 1.31808 | 1.23465 |
| **76** | 4 | 76 | 4 | 0.96061 | 1.48343 |
| **77** | 4 | 77 | 4 | -0.41385 | 0.73823 |
| **78** | 4 | 78 | 4 | 0.37017 | 1.17835 |
| **79** | 4 | 79 | 4 | -0.31153 | 1.74225 |
| **80** | 4 | 80 | 4 | -0.05980 | 0.74363 |
| **81** | 4 | 81 | 4 | -0.65908 | 0.84542 |
| **82** | 4 | 82 | 4 | 0.89349 | 1.31369 |
| **83** | 4 | 83 | 4 | 0.14705 | 0.80028 |
| **84** | 4 | 84 | 4 | -0.86046 | 1.24666 |
| **85** | 4 | 85 | 4 | 0.10850 | 0.32429 |
| **86** | 4 | 86 | 4 | 0.22552 | 0.99662 |
| **87** | 4 | 87 | 4 | 1.10872 | 0.53220 |
| **88** | 4 | 88 | 4 | 0.50120 | 0.68510 |
| **89** | 4 | 89 | 4 | -0.11644 | 0.78678 |
| **90** | 4 | 90 | 4 | -1.21859 | 1.00880 |
| **91** | 4 | 91 | 4 | -0.61184 | 0.29957 |
| **92** | 4 | 92 | 4 | -0.37645 | 1.66983 |
| **93** | 4 | 93 | 4 | -0.76757 | 1.44579 |
| **94** | 4 | 94 | 4 | -0.85354 | 0.81729 |
| **95** | 4 | 95 | 4 | -0.46555 | 0.43423 |
| **96** | 4 | 96 | 4 | -0.88836 | 0.78851 |
| **97** | 4 | 97 | 4 | -0.29504 | 1.22763 |
| **98** | 4 | 98 | 4 | 0.39726 | 0.84862 |
| **99** | 4 | 99 | 4 | -0.05124 | 1.01301 |
| **100** | 4 | 100 | 4 | 0.25391 | 0.72982 |
| **101** | 16 | 1 | 16 | -0.31766 | 0.70770 |
| **102** | 16 | 2 | 16 | 0.45022 | 1.21571 |
| **103** | 16 | 3 | 16 | -0.14583 | 0.88662 |
| **104** | 16 | 4 | 16 | -0.02308 | 0.78743 |
| **105** | 16 | 5 | 16 | -0.06817 | 0.60545 |
| **106** | 16 | 6 | 16 | 0.11544 | 0.97100 |
| **107** | 16 | 7 | 16 | -0.05180 | 1.05466 |
| **108** | 16 | 8 | 16 | -0.09575 | 0.94109 |
| **109** | 16 | 9 | 16 | -0.44356 | 1.39712 |
| **110** | 16 | 10 | 16 | 0.17142 | 0.89516 |
| **111** | 16 | 11 | 16 | -0.13210 | 0.90135 |
| **112** | 16 | 12 | 16 | 0.38577 | 0.84580 |
| **113** | 16 | 13 | 16 | 0.18827 | 1.01069 |
| **114** | 16 | 14 | 16 | -0.06620 | 1.09849 |
| **115** | 16 | 15 | 16 | -0.35974 | 1.12724 |
| **116** | 16 | 16 | 16 | 0.28625 | 0.89364 |
| **117** | 16 | 17 | 16 | -0.00964 | 1.08160 |
| **118** | 16 | 18 | 16 | -0.31526 | 0.96166 |
| **119** | 16 | 19 | 16 | -0.22765 | 0.97686 |
| **120** | 16 | 20 | 16 | -0.49008 | 0.78515 |
| **121** | 16 | 21 | 16 | -0.19830 | 0.86408 |
| **122** | 16 | 22 | 16 | 0.34158 | 1.06393 |
| **123** | 16 | 23 | 16 | 0.05041 | 1.09162 |
| **124** | 16 | 24 | 16 | 0.27931 | 0.95988 |
| **125** | 16 | 25 | 16 | -0.36502 | 0.89999 |
| **126** | 16 | 26 | 16 | 0.06525 | 1.13372 |
| **127** | 16 | 27 | 16 | -0.15971 | 1.02895 |
| **128** | 16 | 28 | 16 | 0.27433 | 1.18065 |
| **129** | 16 | 29 | 16 | -0.10050 | 0.99943 |
| **130** | 16 | 30 | 16 | -0.11540 | 1.07652 |
| **131** | 16 | 31 | 16 | -0.22155 | 0.73148 |
| **132** | 16 | 32 | 16 | -0.06494 | 1.09315 |
| **133** | 16 | 33 | 16 | 0.01792 | 0.79128 |
| **134** | 16 | 34 | 16 | -0.05355 | 1.15789 |
| **135** | 16 | 35 | 16 | 0.00807 | 0.85936 |
| **136** | 16 | 36 | 16 | -0.01869 | 1.18061 |
| **137** | 16 | 37 | 16 | 0.04653 | 0.75865 |
| **138** | 16 | 38 | 16 | 0.13396 | 1.14884 |
| **139** | 16 | 39 | 16 | 0.31644 | 1.20256 |
| **140** | 16 | 40 | 16 | -0.26570 | 0.85638 |
| **141** | 16 | 41 | 16 | 0.02742 | 0.98254 |
| **142** | 16 | 42 | 16 | 0.19691 | 1.03030 |
| **143** | 16 | 43 | 16 | -0.03672 | 0.82993 |
| **144** | 16 | 44 | 16 | -0.06835 | 1.17974 |
| **145** | 16 | 45 | 16 | -0.25281 | 0.83599 |
| **146** | 16 | 46 | 16 | 0.02631 | 0.88462 |
| **147** | 16 | 47 | 16 | 0.33217 | 0.95854 |
| **148** | 16 | 48 | 16 | -0.07709 | 0.72102 |
| **149** | 16 | 49 | 16 | -0.47691 | 1.40565 |
| **150** | 16 | 50 | 16 | -0.03653 | 1.26264 |
| **151** | 16 | 51 | 16 | -0.46295 | 0.79224 |
| **152** | 16 | 52 | 16 | -0.12368 | 0.89594 |
| **153** | 16 | 53 | 16 | 0.27525 | 1.13368 |
| **154** | 16 | 54 | 16 | 0.28658 | 0.85025 |
| **155** | 16 | 55 | 16 | 0.19082 | 0.92449 |
| **156** | 16 | 56 | 16 | -0.23885 | 0.96403 |
| **157** | 16 | 57 | 16 | 0.25004 | 0.55289 |
| **158** | 16 | 58 | 16 | -0.14262 | 0.66762 |
| **159** | 16 | 59 | 16 | 0.07934 | 0.80886 |
| **160** | 16 | 60 | 16 | -0.09454 | 0.73319 |
| **161** | 16 | 61 | 16 | 0.10119 | 1.01400 |
| **162** | 16 | 62 | 16 | -0.28990 | 1.28595 |
| **163** | 16 | 63 | 16 | 0.21843 | 1.02890 |
| **164** | 16 | 64 | 16 | 0.16662 | 0.93231 |
| **165** | 16 | 65 | 16 | -0.19382 | 0.91437 |
| **166** | 16 | 66 | 16 | 0.27930 | 0.79264 |
| **167** | 16 | 67 | 16 | 0.19350 | 1.01349 |
| **168** | 16 | 68 | 16 | 0.30552 | 1.00584 |
| **169** | 16 | 69 | 16 | 0.16574 | 0.79523 |
| **170** | 16 | 70 | 16 | -0.27891 | 0.82153 |
| **171** | 16 | 71 | 16 | -0.58929 | 1.27658 |
| **172** | 16 | 72 | 16 | 0.20644 | 1.07430 |
| **173** | 16 | 73 | 16 | 0.58321 | 0.95072 |
| **174** | 16 | 74 | 16 | -0.00657 | 1.05110 |
| **175** | 16 | 75 | 16 | -0.22872 | 0.99028 |
| **176** | 16 | 76 | 16 | 0.05305 | 0.75534 |
| **177** | 16 | 77 | 16 | 0.58095 | 0.90011 |
| **178** | 16 | 78 | 16 | 0.02205 | 0.95766 |
| **179** | 16 | 79 | 16 | 0.28805 | 0.99589 |
| **180** | 16 | 80 | 16 | -0.07480 | 1.26491 |
| **181** | 16 | 81 | 16 | 0.07983 | 1.05248 |
| **182** | 16 | 82 | 16 | 0.36178 | 0.62463 |
| **183** | 16 | 83 | 16 | 0.06127 | 0.76167 |
| **184** | 16 | 84 | 16 | -0.19207 | 1.03487 |
| **185** | 16 | 85 | 16 | 0.14742 | 0.94614 |
| **186** | 16 | 86 | 16 | -0.21581 | 0.69324 |
| **187** | 16 | 87 | 16 | 0.20372 | 1.14192 |
| **188** | 16 | 88 | 16 | -0.30677 | 0.69184 |
| **189** | 16 | 89 | 16 | 0.37623 | 1.06102 |
| **190** | 16 | 90 | 16 | 0.06726 | 1.20362 |
| **191** | 16 | 91 | 16 | -0.14459 | 1.01786 |
| **192** | 16 | 92 | 16 | -0.00137 | 0.83980 |
| **193** | 16 | 93 | 16 | 0.24968 | 0.79764 |
| **194** | 16 | 94 | 16 | -0.16018 | 0.99494 |
| **195** | 16 | 95 | 16 | 0.30557 | 0.89894 |
| **196** | 16 | 96 | 16 | -0.44755 | 0.71073 |
| **197** | 16 | 97 | 16 | -0.40465 | 1.04413 |
| **198** | 16 | 98 | 16 | -0.31650 | 0.73377 |
| **199** | 16 | 99 | 16 | -0.07128 | 1.03452 |
| **200** | 16 | 100 | 16 | -0.05962 | 0.85360 |
| **201** | 64 | 1 | 64 | -0.15507 | 1.00319 |
| **202** | 64 | 2 | 64 | -0.02283 | 1.08366 |
| **203** | 64 | 3 | 64 | -0.09540 | 1.00149 |
| **204** | 64 | 4 | 64 | 0.04561 | 0.95032 |
| **205** | 64 | 5 | 64 | 0.01886 | 1.00308 |
| **206** | 64 | 6 | 64 | -0.11583 | 0.92438 |
| **207** | 64 | 7 | 64 | 0.07895 | 1.07899 |
| **208** | 64 | 8 | 64 | 0.01518 | 1.02729 |
| **209** | 64 | 9 | 64 | -0.19087 | 0.99140 |
| **210** | 64 | 10 | 64 | -0.03842 | 1.12392 |
| **211** | 64 | 11 | 64 | 0.04370 | 1.02884 |
| **212** | 64 | 12 | 64 | 0.04805 | 0.83595 |
| **213** | 64 | 13 | 64 | 0.05066 | 0.79671 |
| **214** | 64 | 14 | 64 | 0.04945 | 0.98276 |
| **215** | 64 | 15 | 64 | 0.08945 | 1.01112 |
| **216** | 64 | 16 | 64 | 0.00558 | 0.81478 |
| **217** | 64 | 17 | 64 | -0.04696 | 0.85721 |
| **218** | 64 | 18 | 64 | -0.00863 | 1.34296 |
| **219** | 64 | 19 | 64 | -0.19496 | 0.96685 |
| **220** | 64 | 20 | 64 | 0.05771 | 1.03292 |
| **221** | 64 | 21 | 64 | 0.04211 | 0.99647 |
| **222** | 64 | 22 | 64 | 0.13445 | 1.01049 |
| **223** | 64 | 23 | 64 | -0.17126 | 1.06316 |
| **224** | 64 | 24 | 64 | 0.01206 | 1.05137 |
| **225** | 64 | 25 | 64 | 0.04903 | 1.01988 |
| **226** | 64 | 26 | 64 | -0.12499 | 0.88305 |
| **227** | 64 | 27 | 64 | -0.01676 | 0.84643 |
| **228** | 64 | 28 | 64 | 0.01284 | 0.94806 |
| **229** | 64 | 29 | 64 | -0.00862 | 0.99259 |
| **230** | 64 | 30 | 64 | 0.13806 | 0.99954 |
| **231** | 64 | 31 | 64 | -0.10614 | 0.87160 |
| **232** | 64 | 32 | 64 | 0.02523 | 0.97045 |
| **233** | 64 | 33 | 64 | 0.16383 | 1.11982 |
| **234** | 64 | 34 | 64 | -0.10565 | 0.87197 |
| **235** | 64 | 35 | 64 | -0.14315 | 1.14589 |
| **236** | 64 | 36 | 64 | -0.13036 | 0.94048 |
| **237** | 64 | 37 | 64 | 0.10474 | 0.82850 |
| **238** | 64 | 38 | 64 | 0.18319 | 1.05073 |
| **239** | 64 | 39 | 64 | -0.03041 | 0.95092 |
| **240** | 64 | 40 | 64 | 0.11218 | 0.92154 |
| **241** | 64 | 41 | 64 | 0.01703 | 0.86570 |
| **242** | 64 | 42 | 64 | -0.19738 | 0.90515 |
| **243** | 64 | 43 | 64 | 0.08997 | 1.11127 |
| **244** | 64 | 44 | 64 | -0.02502 | 1.08919 |
| **245** | 64 | 45 | 64 | -0.17243 | 0.82543 |
| **246** | 64 | 46 | 64 | 0.20886 | 1.07051 |
| **247** | 64 | 47 | 64 | -0.02098 | 1.12651 |
| **248** | 64 | 48 | 64 | 0.05079 | 1.14063 |
| **249** | 64 | 49 | 64 | 0.03851 | 1.09077 |
| **250** | 64 | 50 | 64 | -0.01630 | 1.19649 |
| **251** | 64 | 51 | 64 | 0.00194 | 1.00885 |
| **252** | 64 | 52 | 64 | -0.06700 | 0.96686 |
| **253** | 64 | 53 | 64 | 0.03019 | 0.97718 |
| **254** | 64 | 54 | 64 | -0.10292 | 0.86680 |
| **255** | 64 | 55 | 64 | -0.10346 | 0.99818 |
| **256** | 64 | 56 | 64 | 0.02345 | 1.07718 |
| **257** | 64 | 57 | 64 | -0.05951 | 1.11503 |
| **258** | 64 | 58 | 64 | 0.03766 | 1.14786 |
| **259** | 64 | 59 | 64 | -0.14012 | 0.93586 |
| **260** | 64 | 60 | 64 | -0.22240 | 1.04876 |
| **261** | 64 | 61 | 64 | 0.16926 | 1.00347 |
| **262** | 64 | 62 | 64 | 0.01888 | 0.97497 |
| **263** | 64 | 63 | 64 | -0.12787 | 0.96312 |
| **264** | 64 | 64 | 64 | -0.03095 | 0.85990 |
| **265** | 64 | 65 | 64 | 0.11657 | 0.86303 |
| **266** | 64 | 66 | 64 | -0.23227 | 1.01581 |
| **267** | 64 | 67 | 64 | 0.11458 | 1.05267 |
| **268** | 64 | 68 | 64 | 0.06679 | 0.92386 |
| **269** | 64 | 69 | 64 | 0.09314 | 0.84410 |
| **270** | 64 | 70 | 64 | -0.10521 | 1.02438 |
| **271** | 64 | 71 | 64 | 0.13226 | 1.19709 |
| **272** | 64 | 72 | 64 | 0.04402 | 1.17389 |
| **273** | 64 | 73 | 64 | -0.23423 | 0.99171 |
| **274** | 64 | 74 | 64 | 0.01152 | 0.89453 |
| **275** | 64 | 75 | 64 | 0.19361 | 0.92087 |
| **276** | 64 | 76 | 64 | 0.16852 | 0.94584 |
| **277** | 64 | 77 | 64 | 0.03244 | 1.03288 |
| **278** | 64 | 78 | 64 | -0.13247 | 1.06831 |
| **279** | 64 | 79 | 64 | -0.05038 | 0.84462 |
| **280** | 64 | 80 | 64 | 0.13410 | 0.97870 |
| **281** | 64 | 81 | 64 | -0.02488 | 0.79945 |
| **282** | 64 | 82 | 64 | 0.21816 | 0.95892 |
| **283** | 64 | 83 | 64 | 0.22520 | 1.02380 |
| **284** | 64 | 84 | 64 | -0.04739 | 0.96875 |
| **285** | 64 | 85 | 64 | 0.09067 | 0.95327 |
| **286** | 64 | 86 | 64 | -0.02244 | 0.94377 |
| **287** | 64 | 87 | 64 | -0.15120 | 1.09192 |
| **288** | 64 | 88 | 64 | 0.17516 | 1.02517 |
| **289** | 64 | 89 | 64 | -0.03343 | 1.01336 |
| **290** | 64 | 90 | 64 | -0.06344 | 1.01949 |
| **291** | 64 | 91 | 64 | 0.04282 | 0.99647 |
| **292** | 64 | 92 | 64 | 0.25793 | 0.92900 |
| **293** | 64 | 93 | 64 | -0.11616 | 0.94186 |
| **294** | 64 | 94 | 64 | 0.03366 | 1.02952 |
| **295** | 64 | 95 | 64 | -0.00591 | 0.95008 |
| **296** | 64 | 96 | 64 | 0.04515 | 0.99594 |
| **297** | 64 | 97 | 64 | 0.06952 | 0.80680 |
| **298** | 64 | 98 | 64 | 0.12647 | 0.94614 |
| **299** | 64 | 99 | 64 | -0.16234 | 1.08498 |
| **300** | 64 | 100 | 64 | 0.09497 | 1.10280 |
| **301** | 100 | 1 | 100 | 0.09093 | 1.04353 |
| **302** | 100 | 2 | 100 | 0.00177 | 0.96147 |
| **303** | 100 | 3 | 100 | -0.06158 | 1.05626 |
| **304** | 100 | 4 | 100 | -0.04331 | 0.96546 |
| **305** | 100 | 5 | 100 | -0.03887 | 0.97802 |
| **306** | 100 | 6 | 100 | -0.09708 | 0.97009 |
| **307** | 100 | 7 | 100 | -0.12745 | 1.00132 |
| **308** | 100 | 8 | 100 | 0.01648 | 1.00267 |
| **309** | 100 | 9 | 100 | 0.03660 | 0.88965 |
| **310** | 100 | 10 | 100 | 0.22231 | 1.10825 |
| **311** | 100 | 11 | 100 | -0.15871 | 1.05621 |
| **312** | 100 | 12 | 100 | -0.15126 | 1.13990 |
| **313** | 100 | 13 | 100 | 0.02222 | 0.97474 |
| **314** | 100 | 14 | 100 | 0.12175 | 1.17983 |
| **315** | 100 | 15 | 100 | -0.03055 | 1.02902 |
| **316** | 100 | 16 | 100 | 0.06657 | 1.00236 |
| **317** | 100 | 17 | 100 | -0.11717 | 0.98524 |
| **318** | 100 | 18 | 100 | -0.15129 | 0.87170 |
| **319** | 100 | 19 | 100 | -0.07433 | 1.00867 |
| **320** | 100 | 20 | 100 | -0.13810 | 0.96863 |
| **321** | 100 | 21 | 100 | -0.01771 | 1.08741 |
| **322** | 100 | 22 | 100 | -0.15322 | 1.09211 |
| **323** | 100 | 23 | 100 | -0.06559 | 1.04057 |
| **324** | 100 | 24 | 100 | 0.00081 | 1.05277 |
| **325** | 100 | 25 | 100 | -0.05182 | 1.10865 |
| **326** | 100 | 26 | 100 | -0.05161 | 0.92938 |
| **327** | 100 | 27 | 100 | 0.01556 | 1.09560 |
| **328** | 100 | 28 | 100 | -0.02355 | 0.86812 |
| **329** | 100 | 29 | 100 | -0.01424 | 0.92542 |
| **330** | 100 | 30 | 100 | 0.00071 | 0.98638 |
| **331** | 100 | 31 | 100 | -0.07208 | 1.02550 |
| **332** | 100 | 32 | 100 | 0.15152 | 1.01362 |
| **333** | 100 | 33 | 100 | -0.06457 | 1.03920 |
| **334** | 100 | 34 | 100 | -0.04157 | 0.96369 |
| **335** | 100 | 35 | 100 | -0.02190 | 1.05557 |
| **336** | 100 | 36 | 100 | -0.05710 | 0.94189 |
| **337** | 100 | 37 | 100 | -0.26647 | 1.05307 |
| **338** | 100 | 38 | 100 | -0.05449 | 0.98555 |
| **339** | 100 | 39 | 100 | -0.15343 | 0.99061 |
| **340** | 100 | 40 | 100 | 0.02398 | 0.93759 |
| **341** | 100 | 41 | 100 | 0.09706 | 0.97406 |
| **342** | 100 | 42 | 100 | -0.16530 | 0.90091 |
| **343** | 100 | 43 | 100 | -0.10980 | 0.92904 |
| **344** | 100 | 44 | 100 | 0.02288 | 0.96096 |
| **345** | 100 | 45 | 100 | 0.11783 | 0.97260 |
| **346** | 100 | 46 | 100 | 0.05075 | 1.24081 |
| **347** | 100 | 47 | 100 | 0.03066 | 1.02961 |
| **348** | 100 | 48 | 100 | 0.08924 | 0.89370 |
| **349** | 100 | 49 | 100 | 0.13595 | 1.01299 |
| **350** | 100 | 50 | 100 | -0.05888 | 0.98459 |
| **351** | 100 | 51 | 100 | 0.18453 | 0.93333 |
| **352** | 100 | 52 | 100 | 0.09378 | 1.00590 |
| **353** | 100 | 53 | 100 | -0.01021 | 0.99204 |
| **354** | 100 | 54 | 100 | 0.03119 | 1.06135 |
| **355** | 100 | 55 | 100 | 0.00466 | 1.04412 |
| **356** | 100 | 56 | 100 | 0.06325 | 1.02397 |
| **357** | 100 | 57 | 100 | 0.04248 | 0.90262 |
| **358** | 100 | 58 | 100 | 0.06963 | 0.97990 |
| **359** | 100 | 59 | 100 | -0.09736 | 0.95301 |
| **360** | 100 | 60 | 100 | -0.03876 | 1.15531 |
| **361** | 100 | 61 | 100 | -0.08546 | 1.04149 |
| **362** | 100 | 62 | 100 | 0.07509 | 0.95605 |
| **363** | 100 | 63 | 100 | -0.09783 | 0.90664 |
| **364** | 100 | 64 | 100 | 0.06596 | 1.11450 |
| **365** | 100 | 65 | 100 | -0.10525 | 1.02331 |
| **366** | 100 | 66 | 100 | -0.02636 | 0.94249 |
| **367** | 100 | 67 | 100 | 0.07709 | 0.91310 |
| **368** | 100 | 68 | 100 | 0.14589 | 1.05031 |
| **369** | 100 | 69 | 100 | -0.09469 | 0.89954 |
| **370** | 100 | 70 | 100 | 0.22677 | 0.94723 |
| **371** | 100 | 71 | 100 | 0.22579 | 1.02114 |
| **372** | 100 | 72 | 100 | 0.08355 | 0.93139 |
| **373** | 100 | 73 | 100 | 0.06301 | 1.02599 |
| **374** | 100 | 74 | 100 | 0.02175 | 1.01339 |
| **375** | 100 | 75 | 100 | 0.03921 | 0.96568 |
| **376** | 100 | 76 | 100 | -0.18192 | 1.11302 |
| **377** | 100 | 77 | 100 | -0.03043 | 1.05048 |
| **378** | 100 | 78 | 100 | 0.01774 | 0.97098 |
| **379** | 100 | 79 | 100 | 0.01829 | 0.86877 |
| **380** | 100 | 80 | 100 | -0.08415 | 0.95869 |
| **381** | 100 | 81 | 100 | -0.16303 | 0.98052 |
| **382** | 100 | 82 | 100 | 0.04479 | 1.08687 |
| **383** | 100 | 83 | 100 | -0.03571 | 0.94087 |
| **384** | 100 | 84 | 100 | -0.00997 | 1.01761 |
| **385** | 100 | 85 | 100 | 0.13440 | 0.92436 |
| **386** | 100 | 86 | 100 | 0.10085 | 0.99356 |
| **387** | 100 | 87 | 100 | -0.07797 | 0.98011 |
| **388** | 100 | 88 | 100 | 0.00282 | 0.82109 |
| **389** | 100 | 89 | 100 | 0.00466 | 1.03998 |
| **390** | 100 | 90 | 100 | 0.04595 | 0.94775 |
| **391** | 100 | 91 | 100 | 0.10188 | 1.02303 |
| **392** | 100 | 92 | 100 | -0.03273 | 0.95379 |
| **393** | 100 | 93 | 100 | -0.07284 | 1.00406 |
| **394** | 100 | 94 | 100 | -0.04726 | 1.09313 |
| **395** | 100 | 95 | 100 | 0.19178 | 1.02708 |
| **396** | 100 | 96 | 100 | -0.00368 | 0.93163 |
| **397** | 100 | 97 | 100 | -0.00583 | 0.97083 |
| **398** | 100 | 98 | 100 | -0.12660 | 0.98002 |
| **399** | 100 | 99 | 100 | -0.09707 | 0.97721 |
| **400** | 100 | 100 | 100 | -0.21901 | 0.92078 |

|  |
| --- |
| ‘SUM=OBSERVED NUMBER OF SUCCESSES’ |
| ‘MEAN=OBSERVED PROPORTION OF SUCCESSES’ |

The MEANS Procedure

Ns=4

| **Analysis Variable : mean the mean, x1** | | | | |
| --- | --- | --- | --- | --- |
| **N** | **Mean** | **Std Dev** | **Minimum** | **Maximum** |
| 100 | -0.0071587 | 0.5179232 | -1.6072099 | 1.3180808 |

Ns=16

| **Analysis Variable : mean the mean, x1** | | | | |
| --- | --- | --- | --- | --- |
| **N** | **Mean** | **Std Dev** | **Minimum** | **Maximum** |
| 100 | -0.0049043 | 0.2483128 | -0.5892935 | 0.5832072 |

Ns=64

| **Analysis Variable : mean the mean, x1** | | | | |
| --- | --- | --- | --- | --- |
| **N** | **Mean** | **Std Dev** | **Minimum** | **Maximum** |
| 100 | 0.0028030 | 0.1125559 | -0.2342301 | 0.2579324 |

Ns=100

| **Analysis Variable : mean the mean, x1** | | | | |
| --- | --- | --- | --- | --- |
| **N** | **Mean** | **Std Dev** | **Minimum** | **Maximum** |
| 100 | -0.0088480 | 0.0992096 | -0.2664659 | 0.2267682 |