Identifying Outliers

Identifying Outliers

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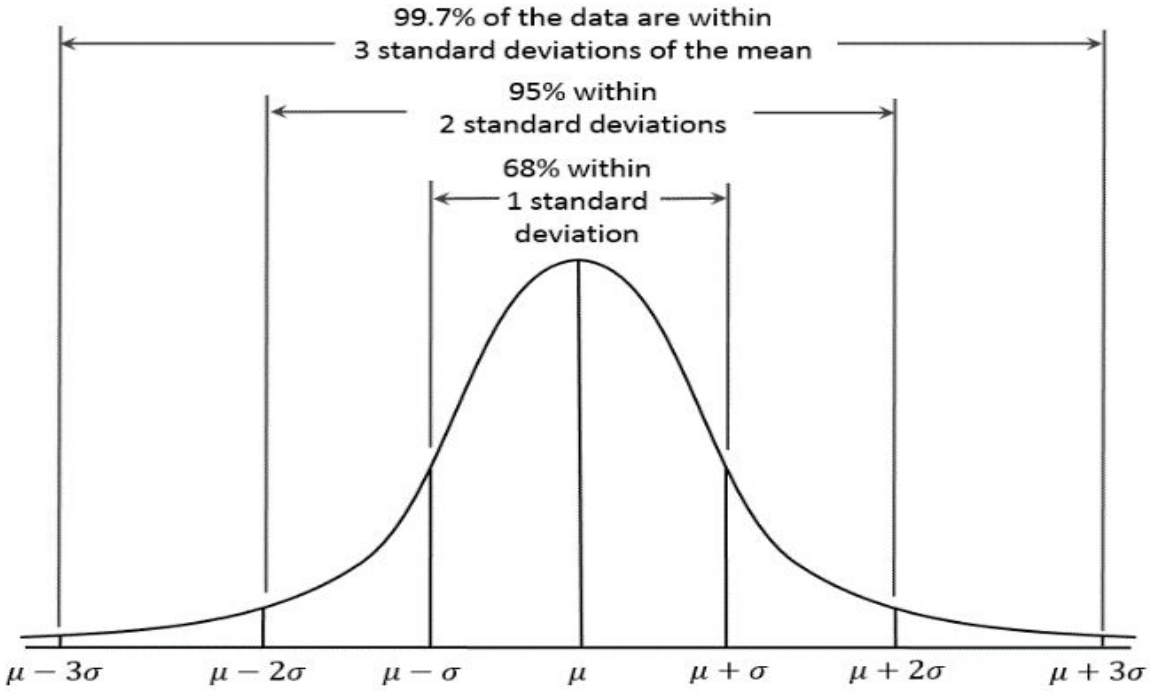
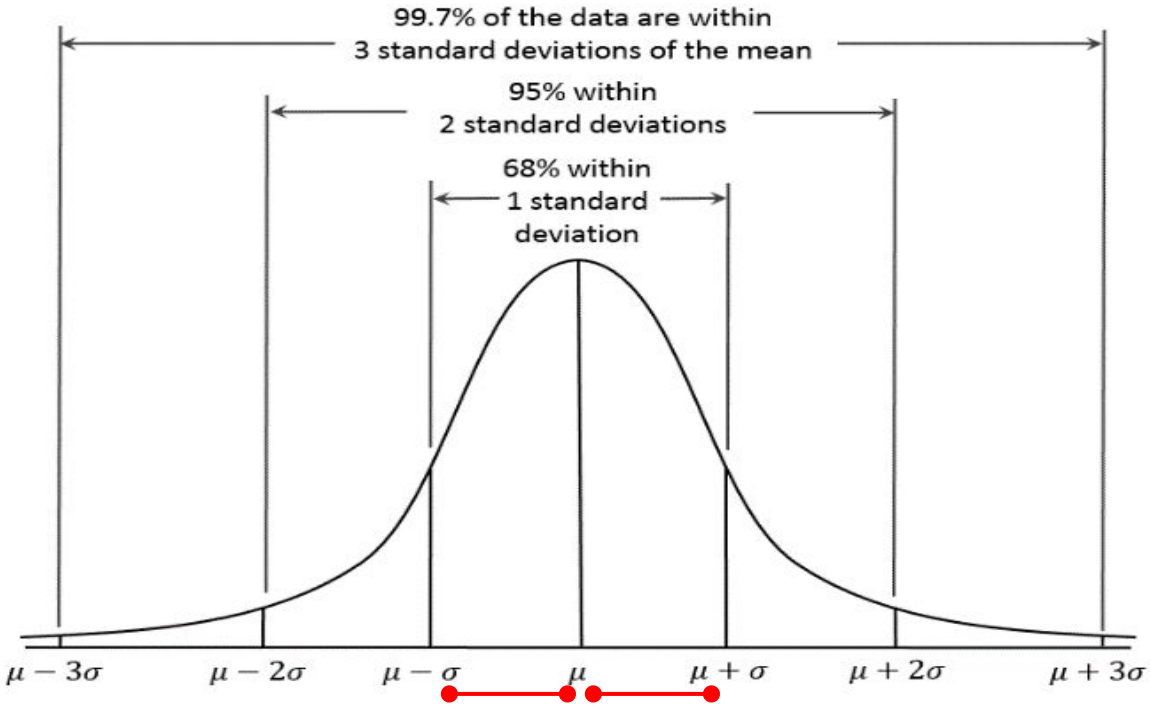


Identifying Outliers



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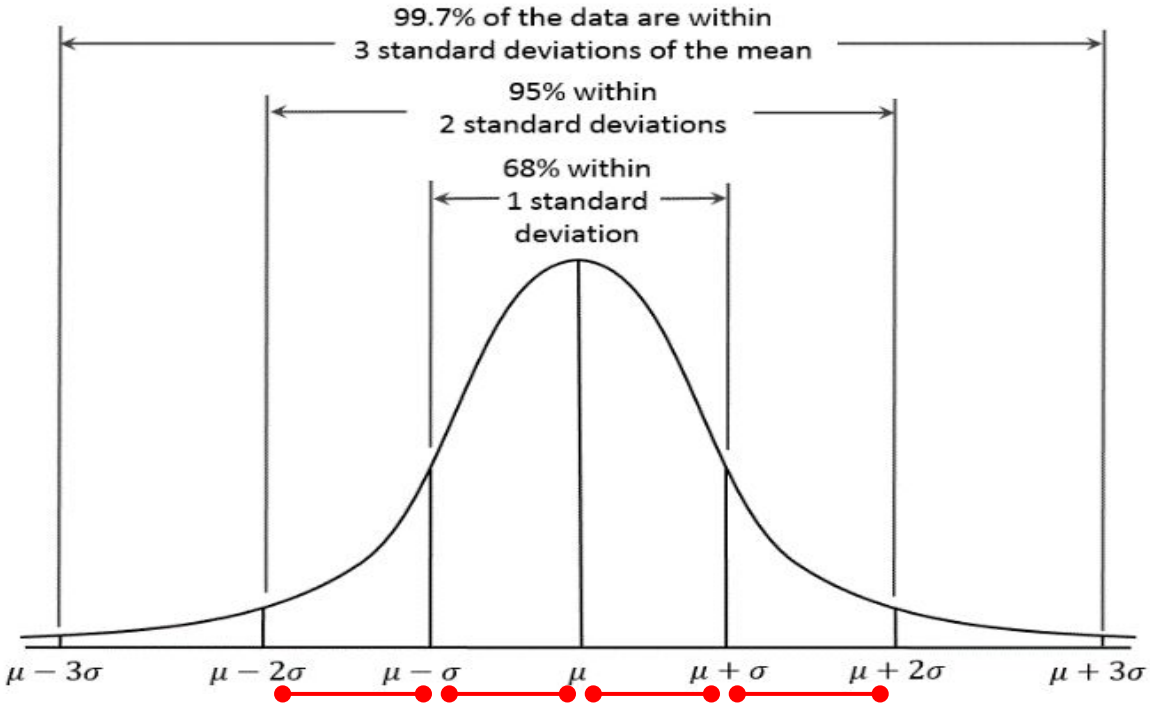
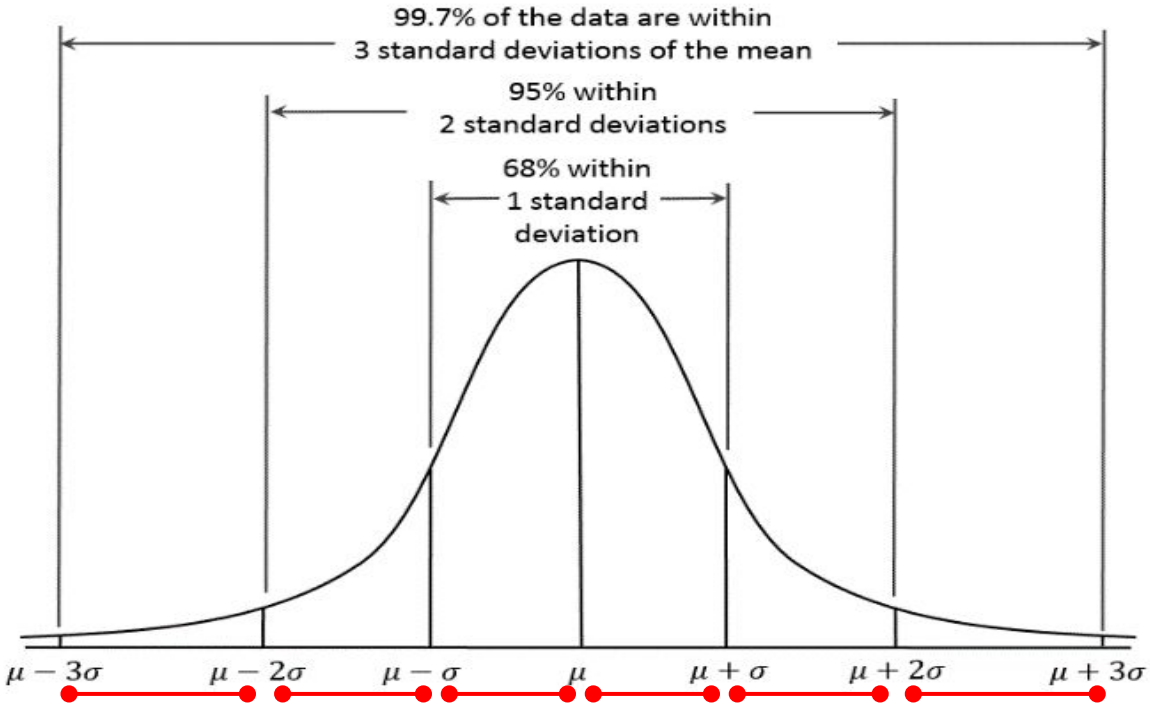
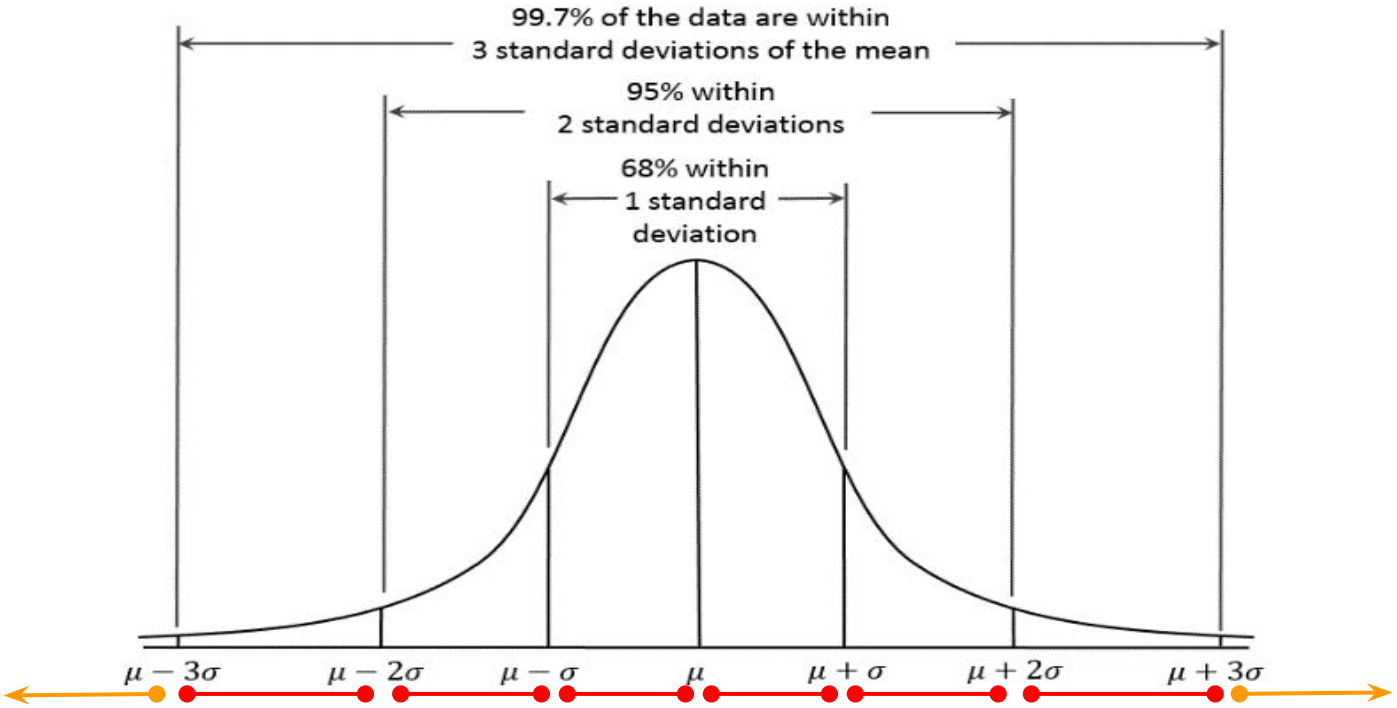


Identifying Outliers



Identifying Outliers



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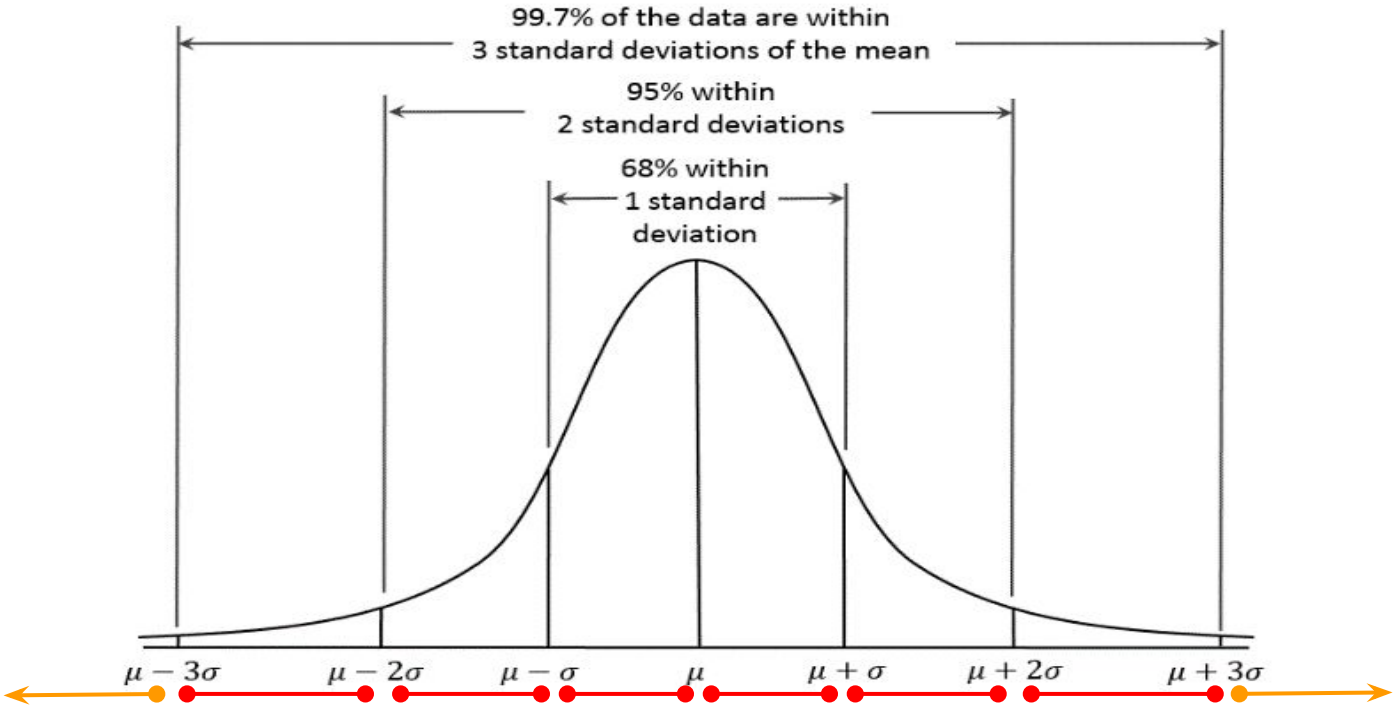
Identifying Outliers



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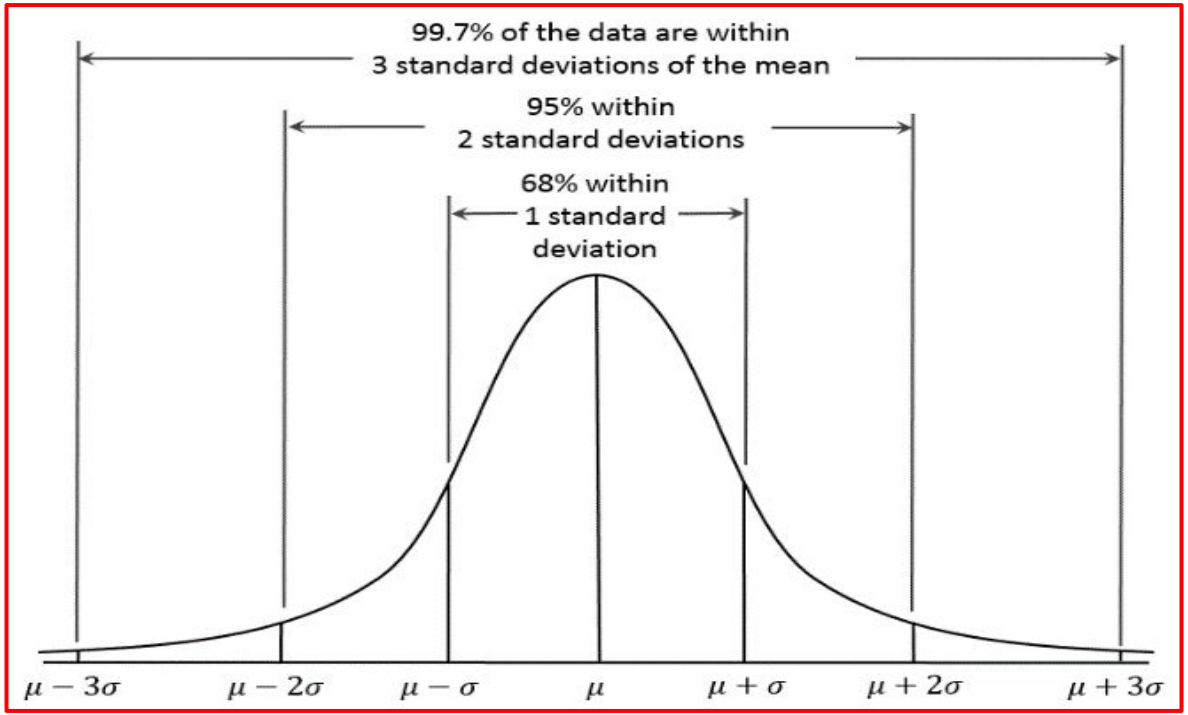

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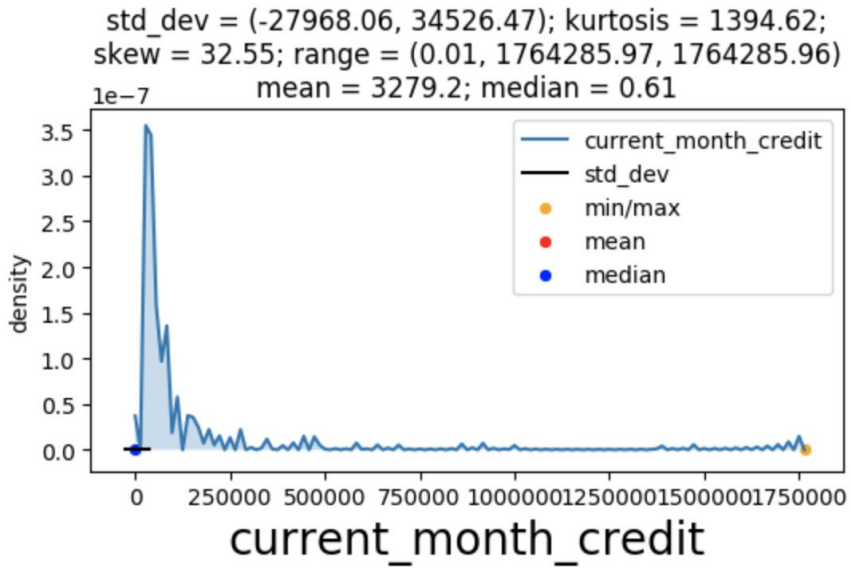

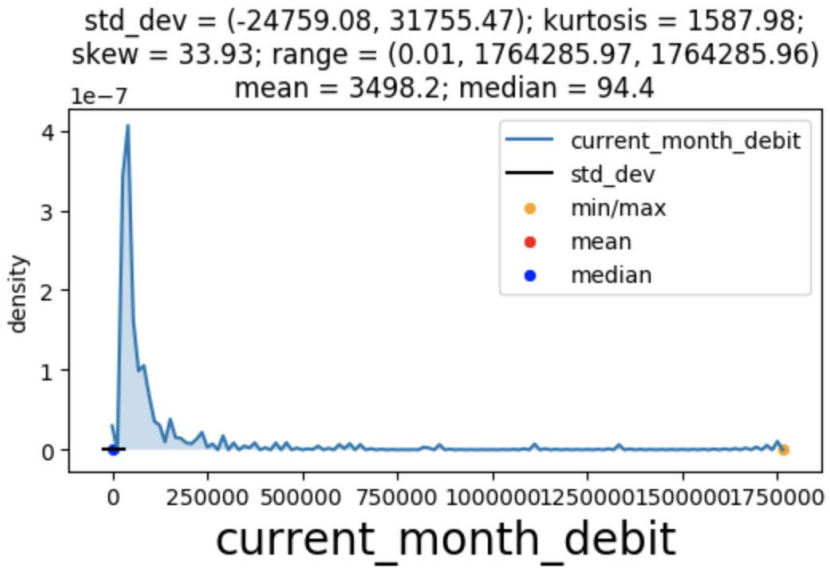

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Identifying Outliers

Identifying Outliers

- Quantiles

Quantiles

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 100 101 … 149 150 151 … 198 199

Quantiles

Middle Value = 100

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 **100** 101 … 149 150 151 … 198 199

Quantiles

Middle Value = 100 = 0.5 Quantile

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 **100** 101 … 149 150 151 … 198 199

Quantiles

Middle Value = 100 = 0.5 Quantile
0.25 Quantile =
0.75 Quantile =

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 **100** 101 … 149 150 151 … 198 199

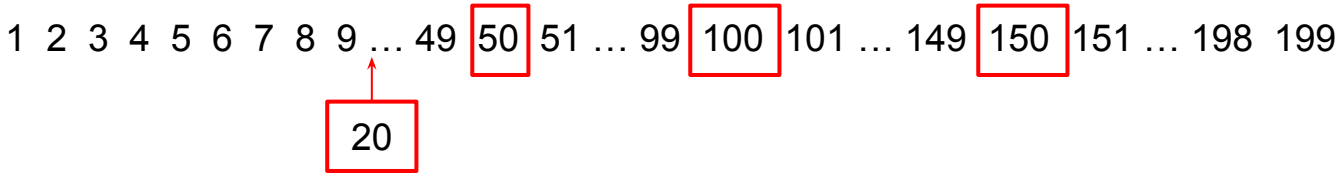
Quantiles

Middle Value = 100 = 0.5 Quantile
0.25 Quantile = 50
0.75 Quantile = 150

1 2 3 4 5 6 7 8 9 … 49 **50** 51 … 99 **100** 101 … 149 **150** 151 … 198 199

Quantiles

Middle Value = 100 = 0.5 Quantile
0.25 Quantile = 50
0.75 Quantile = 150



Quantiles

Middle Value = 100 = 0.5 Quantile = Median
0.25 Quantile = 50
0.75 Quantile = 150

1 2 3 4 5 6 7 8 9 … 49 **50** 51 … 99 **100** 101 … 149 **150** 151 … 198 199

Quartiles

Middle Value = 100 = 0.5 Quantile = Median
0.25 Quantile = 50
0.75 Quantile = 150

} Quartiles

1 2 3 4 5 6 7 8 9 … 49 **50** 51 … 99 **100** 101 … 149 **150** 151 … 198 199

Quartiles

Middle Value = 100 = 0.5 Quantile = Median
0.25 Quantile = 50
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} Quartiles

1 2 3 4 5 6 7 8 9 … 49 50

Quartiles

Middle Value = 100 = 0.5 Quantile = Median
0.25 Quantile = 50
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} Quartiles

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 100

Quartiles

Middle Value = 100 = 0.5 Quantile = Median
0.25 Quantile = 50
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} Quartiles

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 100 101 … 149 150

Quartiles

Middle Value = 100 = 0.5 Quantile = Median
0.25 Quantile = 50
0.75 Quantile = 150

} Quartiles

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 100 101 … 149 150 151 … 198 199

Identifying Outliers

- Quantiles
- Interquartile Range (IQR)

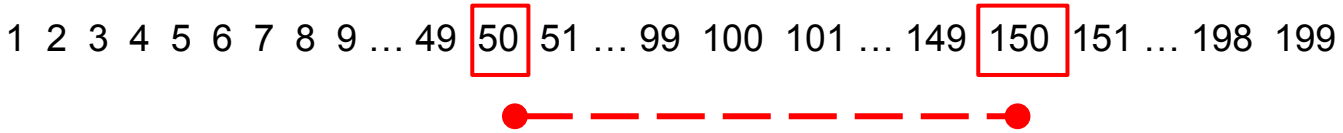
Interquartile Range

Difference between values at second quartile and third quartile.

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 100 101 … 149 150 151 … 198 199

Interquartile Range

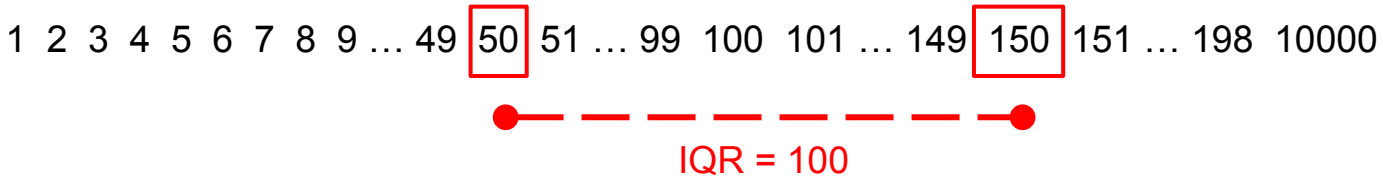
Difference between values at first quartile and third quartile.



Interquartile Range vs Range

1 2 3 4 5 6 7 8 9 … 49 50 51 … 99 100 101 … 149 150 151 … 198 10000

Interquartile Range vs Range



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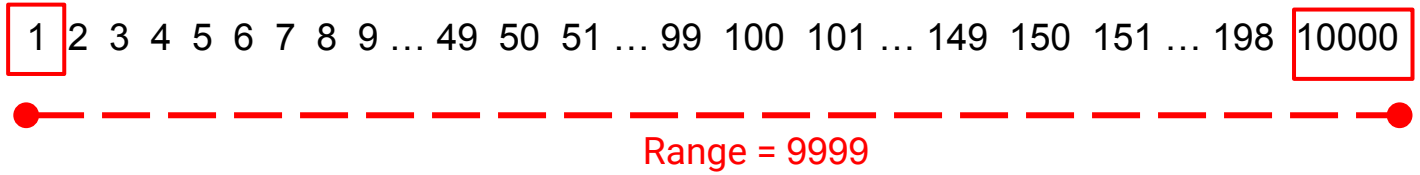
Interquartile Range vs Range



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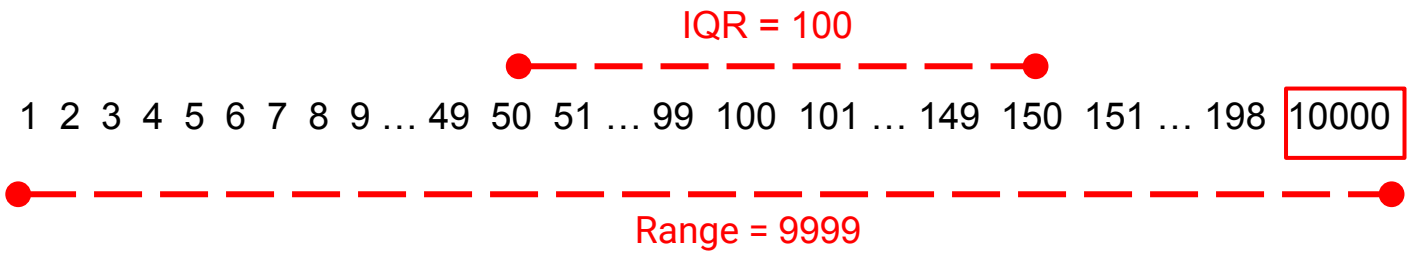
Interquartile Range vs Range



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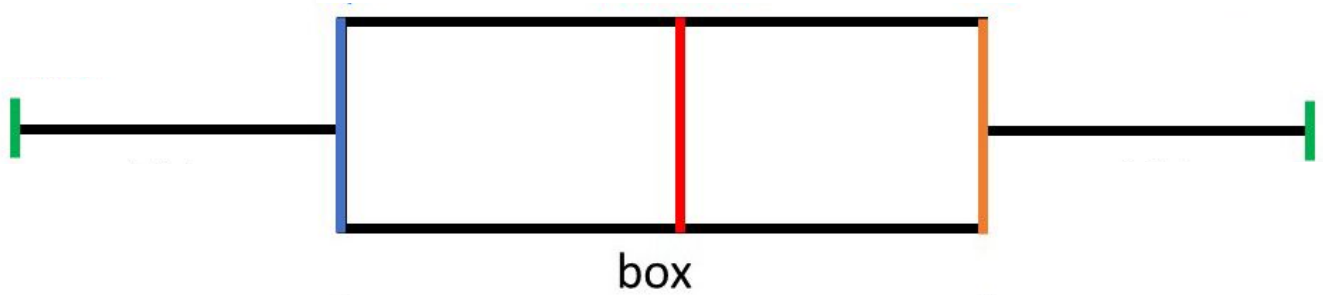
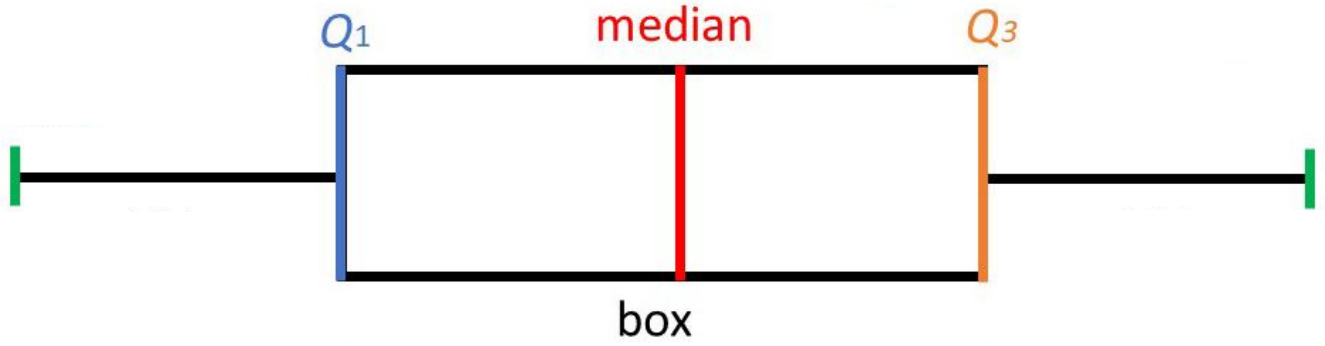
Identifying Outliers

- Quantiles
- Interquartile Range (IQR)
- Boxplots

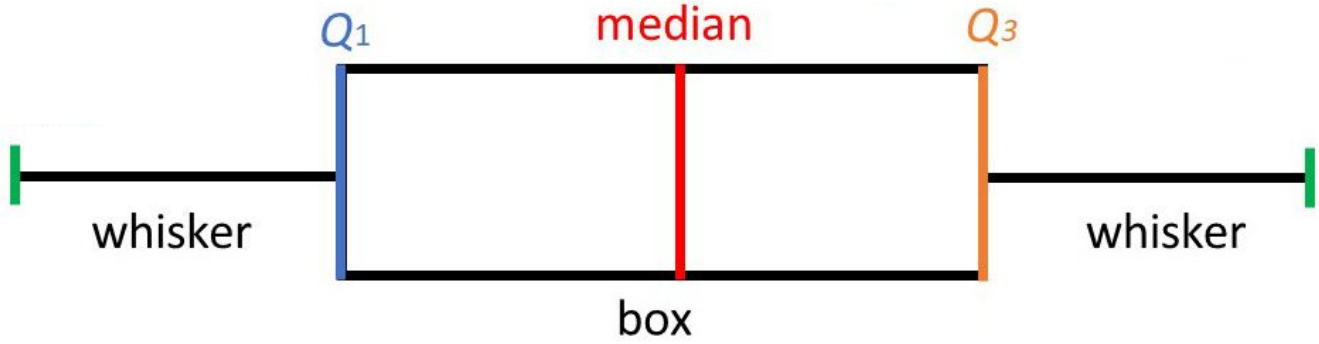
Boxplot



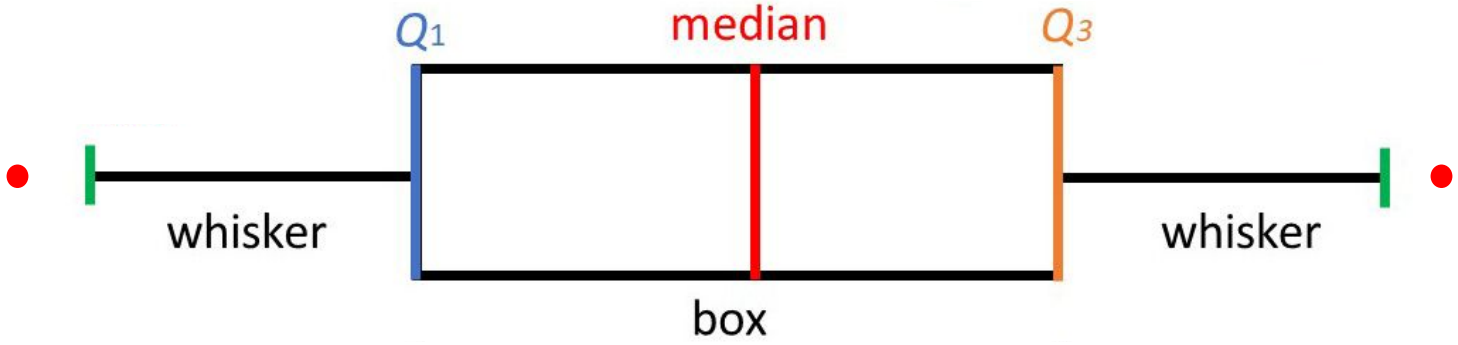
Boxplot



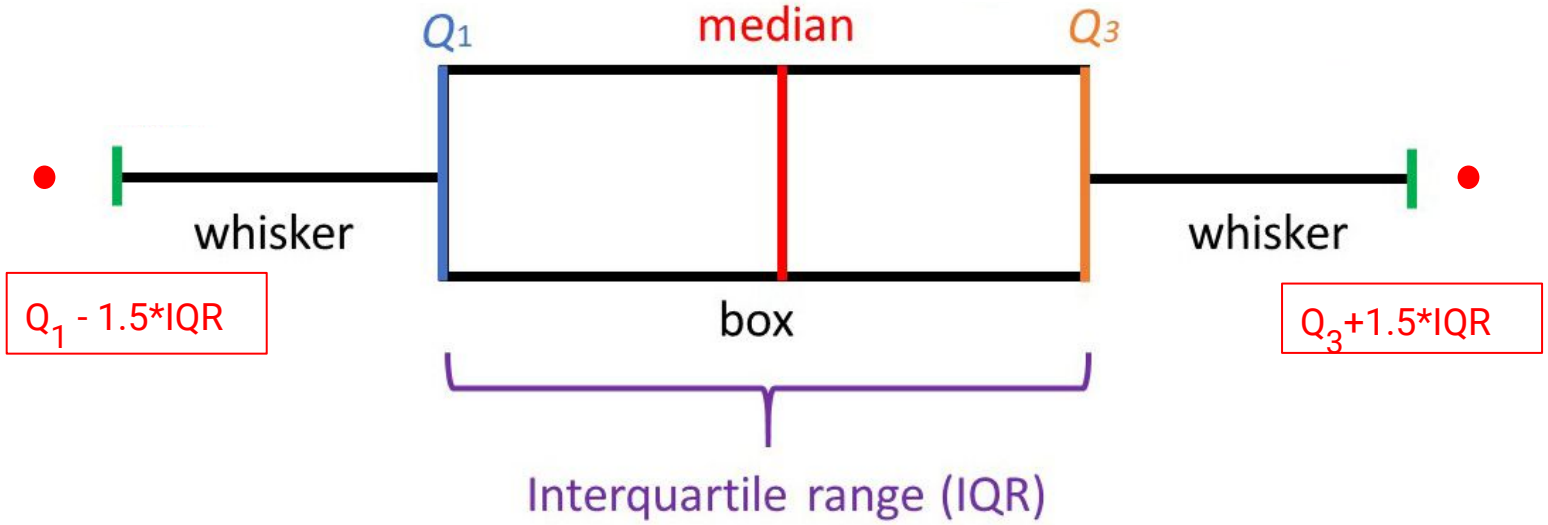
Boxplot



Boxplot



Boxplot



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Thank You!