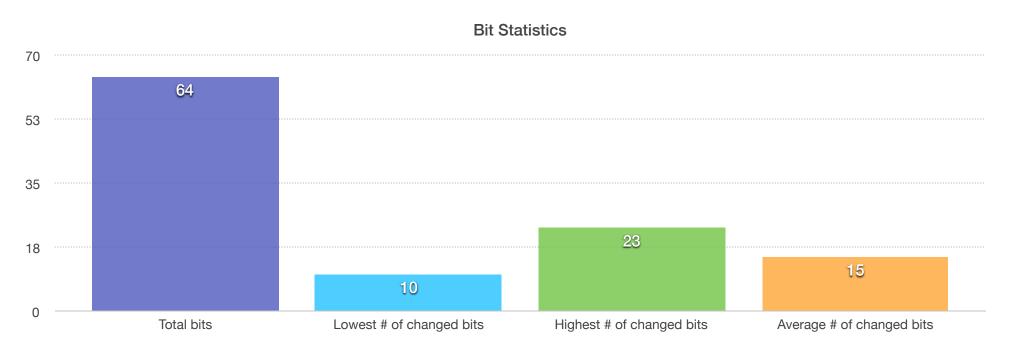
## **Statistics**

For the message **Test Msg**, we are given an array of **8 bytes** and a total of **64 bits**. We flip each bit individually in our message, and compute a new hash each time. For every bit flip, the **lowest amount** of bits that change is **10**. The **highest amount** of bits that change is **23**. Our average bit difference is **15**.

STAT	AMOUNT
Total bits	64
Lowest # of changed bits	10
Highest # of changed bits	23
Average # of changed bits	15

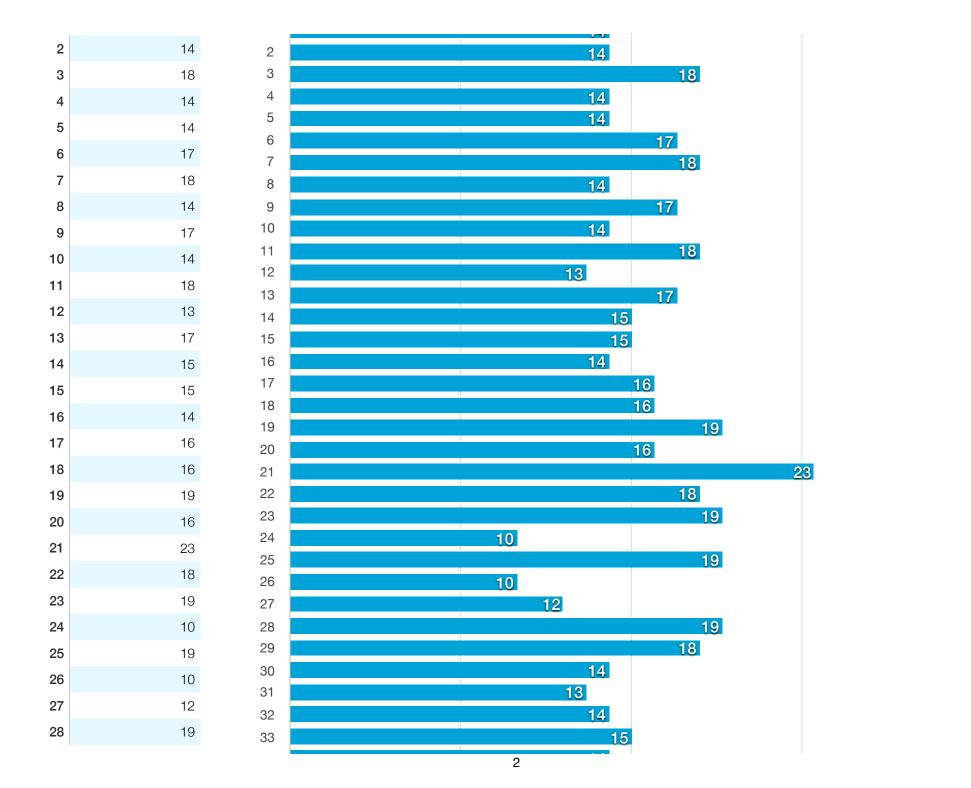


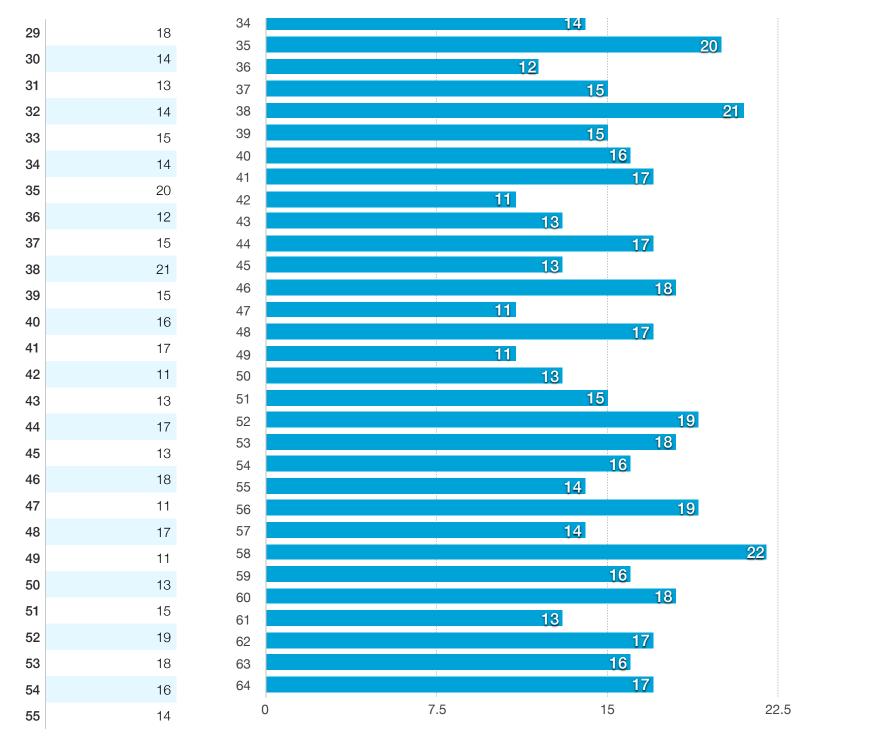


ChangesPer Bit

14

1





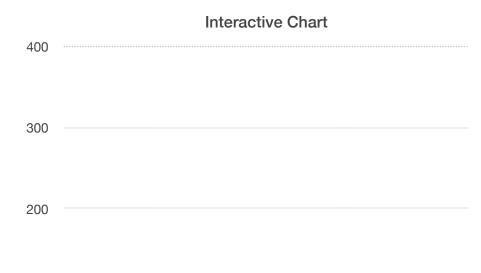
56	19
57	14
58	22
59	16
60	18
61	13
62	17
63	16
64	17

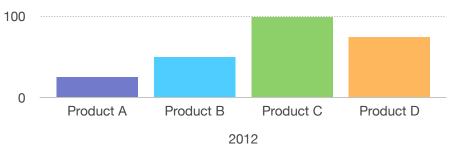
**Interactive** charts let you explore and present data in stages, to emphasize relationships between values or groups of data. Drag the slider to see different data sets.

Interactive charts can be used to show data like sales by group over time, expenses by department, and population changes by country per continent.

## Yearly Sales by Product

DESCRIPTION	2012	2013	2014	2015
Product A	25	50	100	75
Product B	50	100	150	100
Product C	100	200	250	350
Product D	75	100	150	200

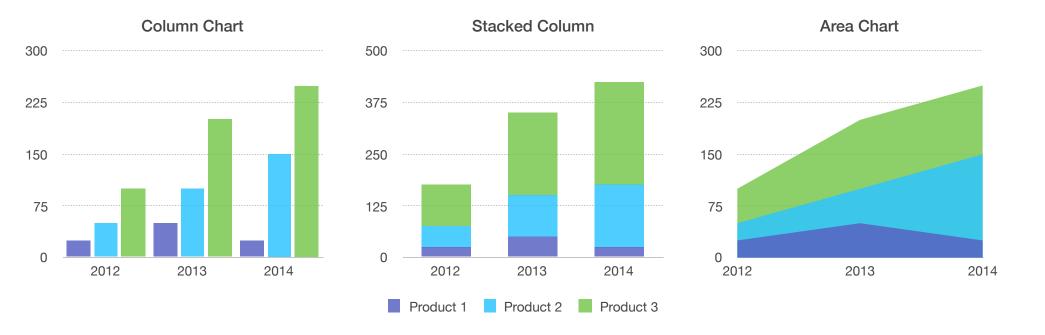




Comparison of Units Sold by Year

**Column**, **stacked column**, and **area** charts compare data from multiple categories. For example, you can compare the annual sales of three products. The x-axis shows years and the y-axis shows quantities.

DESCRIPTION	2012	2013	2014
Product 1	25	50	25
Product 2	50	100	150
Product 3	100	200	250



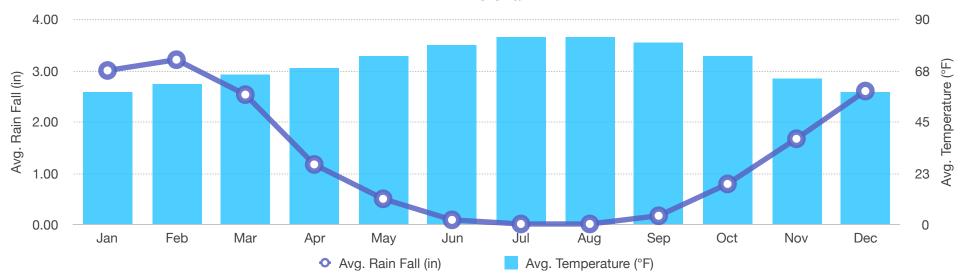
**Two-axis** charts allow you to compare series of data that share x-axis values but have different values on their y-axis. Two-axis charts combine two different charts into one.

Common examples of two-axis charts compare rainfall and temperature, stock closing price and volume change over time, revenue and year-over-year growth, and blood pressure and weight over time.

## Average Rainfall

	AVG. RAIN FALL (IN)	AVG. TEMPERATURE (°F)
Jan	3.01	58
Feb	3.22	62
Mar	2.54	66
Apr	1.18	69
May	0.51	74
Jun	0.10	79
Jul	0.02	82
Aug	0.02	82
Sep	0.18	80
Oct	0.80	74
Nov	1.68	64
Dec	2.61	58





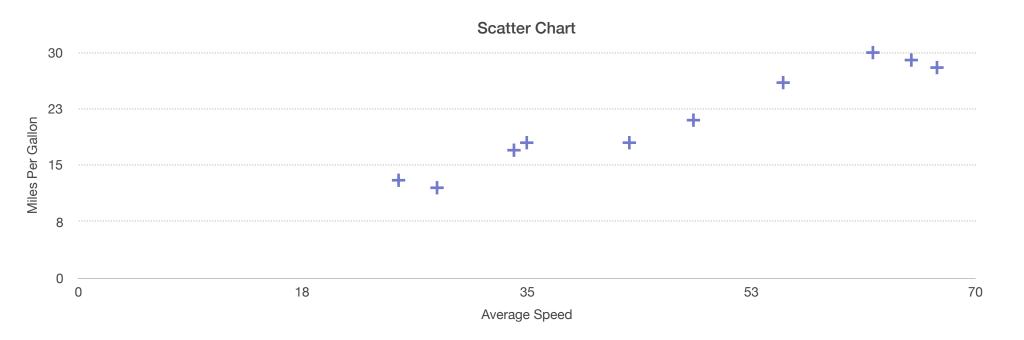
## f

**Scatter** charts show the correlation between pairs of values in a series of data.

Scatter charts can suggest correlations between income and experience, vehicle speed and gas consumption, price and durability, and height and weight.

**AVERAGE SPEED MILES PER GALLON** 

Average Speed vs. Miles Per Gallon



**Bubble** charts show correlations between three points of data in a series: x values, y values, and sizes.

For example, bubble charts can be used to illustrate how profit correlates to the number of employees and units sold, or to suggest a trend in birth rates compared to the populations of different countries over time.

Total Sales by Salespeople and Units Sold

SALESPEOPLE	UNITS SOLD	TOTAL SALES
8	264	\$7,010,784
14	378	\$5,352,858
11	210	\$5,918,000
10	270	\$6,974,910
4	105	\$2,964,150
13	286	\$3,897,894
5	190	\$4,686,350
7	133	\$1,844,843
12	384	\$11,382,528

**Bubble Chart** 

