

PIVOT TABLE CASE STUDIES

DATASET SUMMARY:

- ## DIMENSIONS & MEASURES:

- ## CONCEPTS COVERED:

- | | A | B | C | D | E | F | G | H | I | |
|----|---------------------------------|---------------------|-----------------|-------------------|----------------|-------------------|---------------|-------------------|-------------------|----------|
| 1 | Title | Release Date | Color/B&W | Genre | Language | Country | Rating | Lead Actor | Director Name | |
| 2 | Over the Hill to the Poorhouse | 9/15/1920 | Black and White | Crime | English | USA | Not Rated | Stephen Carr | Harry F. Millarde | |
| 3 | Metropolis | 1/26/1927 | Black and White | Drama | German | Germany | Not Rated | Brigitte Helm | Fritz Lang | |
| 4 | The Broadway Melody | 11/11/1929 | Black and White | Musical | English | USA | Passed | Anita Page | Harry Beaumont | |
| 5 | 42nd Street | 8/29/1933 | Black and White | Comedy | English | USA | Unrated | Ginger Rogers | Lloyd Bacon | |
| 6 | Top Hat | 4/15/1935 | Black and White | Comedy | English | USA | Approved | Ginger Rogers | Mark Sandrich | |
| 7 | Modern Times | 10/7/1936 | Black and White | Comedy | English | USA | G | Paulette Goddard | Charles Chaplin | |
| 8 | Snow White and the Seven Dwarfs | 2/2/1937 | Color | Animation | English | USA | Approved | Adriana Caselotti | William Cottrell | |
| 9 | Gone with the Wind | 11/12/1939 | Color | Drama | English | USA | G | Hattie McDaniel | Victor Fleming | |
| 10 | The Wizard of Oz | 4/9/1939 | Black and White | Adventure | English | USA | Passed | Margaret Hamilton | Victor Fleming | |
| 11 | Fantasia | 5/18/1940 | Color | Animation | English | USA | G | Leopold Stokowski | James Algar | |
| 12 | Pinocchio | 10/12/1940 | Color | Animation | English | USA | Approved | Mel Blanc | Norman Ferguson | |
| 13 | Duel in the Sun | 6/7/1946 | Color | Drama | English | USA | Unrated | Joseph Cotten | King Vidor | |
| 14 | The Best Years of Our Lives | 4/26/1946 | Black and White | Drama | English | USA | Not Rated | Myrna Loy | William Wyler | |
| 15 | The Lady from Shanghai | 12/7/1947 | Black and White | Crime | English | USA | Not Rated | Rita Hayworth | Orson Welles | |
| 16 | The Pirate | | | | | | | | | |
| 17 | Annie Get Your Gun | J | K | L | M | N | O | P | Q | R |
| 18 | The Greatest Show on Earth | Lead Actor FB Likes | Cast FB Likes | Director FB Likes | Movie FB Likes | IMDb Score (1-10) | Total Reviews | Duration (min) | Gross Revenue | Budget |
| 19 | The Beast from 20,000 Fathoms | 2 | 4 | 0 | 0 | 4.8 | 1 | 110 | 3000000 | 100000 |
| 20 | The Robe | 136 | 203 | 756 | 12000 | 8.3 | 260 | 145 | 26435 | 6000000 |
| 21 | On the Waterfront | 77 | 109 | 4 | 167 | 6.3 | 36 | 100 | 2808000 | 379000 |
| 22 | Seven Samurai | 610 | 995 | 24 | 439 | 7.7 | 65 | 89 | 2300000 | 439000 |
| 23 | The Bridge on the River Kwai | 610 | 824 | 10 | 1000 | 7.8 | 66 | 81 | 3000000 | 609000 |
| 24 | Some Like It Hot | 309 | 352 | 0 | 0 | 8.6 | 120 | 87 | 163245 | 1500000 |
| 25 | Psycho | 82 | 229 | 0 | 0 | 7.7 | 145 | 83 | 184925485 | 2000000 |
| 26 | West Side Story | 503 | 1862 | 149 | 16000 | 8.2 | 157 | 226 | 198655278 | 3977000 |
| 27 | Dr. No | 695 | 2509 | 149 | 14000 | 8.1 | 213 | 102 | 22202612 | 2800000 |
| 28 | Lawrence of Arabia | 16 | 16 | 11 | 3000 | 7.8 | 99 | 120 | 76400000 | 2280000 |
| 29 | Cleopatra | 1000 | 1178 | 3 | 0 | 7.5 | 105 | 88 | 84300000 | 2600000 |
| 30 | From Russia with Love | 469 | 2037 | 54 | 403 | 6.9 | 32 | 144 | 20400000 | 8000000 |
| 31 | It's a Mad, Mad, Mad, Mad, Mad | 749 | 1941 | 355 | 0 | 8.1 | 97 | 172 | 23650000 | 2100000 |
| | | 1000 | 1055 | 0 | 0 | 7.7 | 90 | 92 | 7927 | 2300000 |
| | | 89 | 282 | 136 | 359 | 7.1 | 41 | 102 | 2956000 | 3700000 |
| | | 277 | 731 | 24 | 456 | 7 | 21 | 107 | 8000000 | 3768785 |
| | | 232 | 825 | 309 | 625 | 6.7 | 44 | 152 | 36000000 | 4000000 |
| | | 57 | 205 | 7 | 465 | 6.7 | 67 | 80 | 5000000 | 210000 |
| | | 726 | 1920 | 28 | 0 | 6.8 | 42 | 135 | 36000000 | 5000000 |
| | | 10000 | 11094 | 603 | 0 | 8.2 | 134 | 108 | 9600000 | 910000 |
| | | 304 | 338 | 0 | 11000 | 8.7 | 153 | 202 | 269061 | 2000000 |
| | | 682 | 1035 | 767 | 0 | 8.2 | 122 | 161 | 27200000 | 3000000 |
| | | 105 | 527 | 0 | 10000 | 8.3 | 181 | 120 | 25000000 | 2883848 |
| | | 606 | 1885 | 13000 | 18000 | 8.5 | 290 | 108 | 32000000 | 806947 |
| | | 804 | 1802 | 34 | 0 | 7.6 | 120 | 152 | 43650000 | 6000000 |
| | | 650 | 1421 | 92 | 5000 | 7.3 | 184 | 110 | 16067035 | 1100000 |
| | | 607 | 1076 | 767 | 11000 | 8.4 | 181 | 227 | 6000000 | 15000000 |



CASE STUDY: U.S. VOTERS (2012)

DATASET SUMMARY:

- 2012 population and voter registration data from the U.S. Census Bureau, by state and age group

DIMENSIONS & MEASURES:

- **Dimensions:** State, Age
- **Measures:** Total Population, Citizen Population, Registered Voters, Confirmed Voters

CONCEPTS COVERED:

- Calculated Fields
- Value Settings (% of Column, % of Parent)

	A	B	C	D	E	F
1	State	Age	Total Population	Citizen Population	Registered Voters	Confirmed Voters
2	Alabama	18 to 24	439000	428000	212000	155000
3	Alabama	25 to 34	576000	535000	359000	271000
4	Alabama	35 to 44	615000	582000	410000	330000
5	Alabama	45 to 64	1297000	1275000	1051000	939000
6	Alabama	65+	667000	660000	523000	459000
7	Alaska	18 to 24	63000	61000	31000	20000
8	Alaska	25 to 34	109000	103000	70000	46000
9	Alaska	35 to 44	86000	80000	60000	50000
10	Alaska	45 to 64	186000	182000	144000	122000
11	Alaska	65+	72000	69000	55000	51000
12	Arizona	18 to 24	586000	545000	301000	234000
13	Arizona	25 to 34	859000	709000	399000	289000
14	Arizona	35 to 44	870000	713000	437000	382000
15	Arizona	45 to 64	1656000	1502000	1015000	901000
16	Arizona	65+	892000	846000	659000	606000
17	Arkansas	18 to 24	288000	281000	126000	70000
18	Arkansas	25 to 34	362000	336000	194000	140000
19	Arkansas	35 to 44	357000	341000	234000	205000
20	Arkansas	45 to 64	742000	704000	498000	442000
21	Arkansas	65+	449000	448000	324000	267000
22	California	18 to 24	3962000	3479000	1787000	1447000
23	California	25 to 34	5357000	4153000	2548000	2070000
24	California	35 to 44	5030000	3675000	2478000	2118000
25	California	45 to 64	9356000	7827000	5459000	4926000
26	California	65+	4653000	4284000	3084000	2902000
27	Colorado	18 to 24	493000	461000	278000	259000
28	Colorado	25 to 34	693000	602000	411000	363000
29	Colorado	35 to 44	684000	616000	484000	452000
30	Colorado	45 to 64	1354000	1287000	1025000	989000
31	Colorado	65+	593000	577000	437000	432000

n=255

CASE STUDY: SAN FRANCISCO SALARIES

DATASET SUMMARY:

- *Salary information from San Francisco government employees, 2011-2013*

DIMENSIONS & MEASURES:

- **Dimensions:** Employee Name, Year, Employee ID, Job Title
- **Measures:** Base Pay, Overtime Pay, Other Pay

CONCEPTS COVERED:

- *Sorting & Filtering*
- *Grouping*
- *Calculated Fields*
- *Table Layouts*

	A	B	C	D	E	F	G	H
1	Employee Name	Year	Employee ID	Job Title	Base Pay	Overtime Pay	Other Pay	Total Pay
2	A Bernard Fatooh	2011	29354	Sheriff'S Property Keeper	19969.37	0	70.54	20039.91
3	Aaric Pingree	2011	72817	Carpenter	0	0	100	100
4	Aarom Peverill	2013	34121	Public Service Aide-Special Programs	3202.14	0	64.19	3266.33
5	Aaron Obenyah	2012	105528	Publ Svc Aide-Asst To Prof	11577	0	0	11577
6	Aaron Richmond	2011	109147	Public Svc Aide-Public Works	2175.41	0	46.36	2221.77
7	Aaron A Hipolito	2011	105697	Museum Guard	10954.9	0	0	10954.9
8	Aaron C Ballonado	2011	78262	Police Officer 3	123471.15	8199.27	4905.3	136575.72
9	Aaron Chapman	2012	17857	Senior Physician Specialist	47885.61	0	20922.67	68808.28
10	Aaron D Lynch	2011	83567	Deputy Sheriff	87296.9	3265.58	13043.07	103605.55
11	Aaron Del Tredici	2011	41201	Physician Specialist	124568.92	0	3492	128060.92
12	Aaron Dunn	2013	13278	Transit Operator	65196.68	16571.53	2189.42	83957.63
13	Aaron E Vurek	2011	88715	Roofer	79136.84	883.8	2220	82240.64
14	Aaron Golbus	2012	51577	Wharfinger 2	78365.51	0	0	78365.51
15	Aaron H Freifeld	2012	105486	Recreation Leader	11757.37	0	64.44	11821.81
16	Aaron Hipolito	2011	68705	Museum Guard	10233.46	70.35	0	10303.81
17	Aaron J Cox	2012	107637	Public Svc Aide-Public Works	5723.62	0	0	5723.62
18	Aaron Loukonen	2013	52003	Special Nurse	85759.06	2505.87	14044.74	102309.67
19	Aaron Lozada	2012	38631	Sergeant 3	135967.46	16677.69	6370.85	159016
20	Aaron M Chen	2012	87533	Automotive Service Worker	64312.21	11361.2	12291.21	87964.62
21	Aaron M Del Tredici	2011	79047	Physician Specialist	129528.39	0	3600	133128.39
22	Aaron Patterson	2011	67426	Ps Aide Health Services	15131.57	0	0	15131.57
23	Aaron S Cramer	2013	79248	Registered Nurse	115372.35	8546.13	6484.78	130403.26
24	Aaron S Duran	2011	91293	Automotive Mechanic	73376.2	568.85	1998.63	75943.68
25	Aaron Sher	2011	33429	Public Service Aide-Assistant To Professionals	4666.32	0	0	4666.32
26	Aaron Smith	2012	41965	Is Engineer-Senior	115747.23	0	6329.79	122077.02
27	Aaron T Dunn	2013	86464	Transit Operator	68552.52	17182.65	2598.21	88333.38
28	Aaron Wu	2012	28292	Public Service Aide-Assistant To Professionals	27511.25	0	0	27511.25
29	Abayomi B Ikutiminu	2013	96696	Inspector, Weights & Measures	56641	0	540	57181
30	Abby Burg	2013	27362	Criminalist Ii	35189	0	0	35189

n=24,285

CASE STUDY: SHARK ATTACK RECORDS

DATASET SUMMARY:

- Shark attack records from 1900-2016

DIMENSIONS & MEASURES:

- Dimensions:** Case Number, Date, Type, Country, Area, Location, Activity, Name, Gender, Age, Injury, Fatal (Y/N), Species, Investigator or Source
- Measures:** None

CONCEPTS COVERED:

- Date Grouping
- Value Settings (% of Column, Running Total)
- PivotCharts

	A	B	C	D	E	F	G
1	Case Number	Date	Type	Country	Area	Location	Activity
2	1900.01.28	1/28/1900	Unprovoked	Australia	New South Wales	Lane Cove River, Sydney Harbor (Estuary)	Standing, gathering oyster
3	1900.07.00	7/1/1900	Provoked	USA	Connecticut	Bridgeport, Fairfield County	
4	1900.07.14	7/14/1900	Invalid	USA	Hawaii	Makapu'u Point, O'ahu	Hunting seashells
5	1900.07.31	7/31/1900	Unprovoked	Croatia	Primorje-Gorski Kotar County	Volosko, Opatija	Swimming
6	1900.08.21	8/21/1900	Unprovoked	USA	North Carolina	Southport, Brunswick County	Bathing
7	1900.09.05	9/5/1900	Unprovoked	USA	Hawaii	Waikiki Beach, Oahu	Floating
8	1900.09.13	9/13/1900	Unprovoked	USA	Rhode Island	Coddington Cove	Diving
9	1900.09.15	9/15/1900	Unprovoked	Australia	Queensland	Townsville	Swimming
10	1900.10.27	10/27/1900	Invalid	South Africa	Western Cape Province	Woodstock Beach, Cape Town	Swimming
11	1900.11.14	11/14/1900	Unprovoked	South Africa	Western Cape Province	Three Anchor Bay	Swimming
12	1900.12.27	12/27/1900	Unprovoked	Australia	New South Wales	Middle Harbour, Sydney	Bathing
13	1901.01.30	1/30/1901	Unprovoked	Australia	Queensland	Brisbane	Bathing
14		H	I	J	K	L	M
15	1901.06.29.R	Name	Gender	Age	Injury	Fatal (Y/N)	Species
16	1901.07.17	Charles Duck	M	Unknown	Right posterior thigh bitten	N	Poverty Bay Herald, 2/12/1900
17	1901.07.30	skiff with Dr. William T. Healey,	M	Unknown	No injury to occupants. They shot shark, the	N	Times, 8/1/1900
18	1901.09.23.R	Emil Uhlbrecht & unidentified p	M	Unknown	Believed drowned. Uhlbrecht's foot, and the Y		Los Angeles Times, 7/28/1900
19	1901.10.00	male	M	Unknown	FATAL	Y	C. Moore, GSAF
20	1901.12.01	Burris	M	Unknown	Left hand lacerated	N	C. Creswell, GSAF
21	1902.01.19	Joe Hartman	M	Unknown	Bathing suit torn & "imprints of the shark's te	N	Honolulu Republican, 9/6/1900
22	1902.01.19.R	George Brown	M	Unknown	No injury	N	NY Times, 9/14/1900
23	1902.01.25.R	John Hennessy	M	Unknown	Laceration to right leg	N	Sydney Morning Herald, 9/17/1900
24	1902.02.22.R	Amos Layzell	M	Unknown	Probable drowning & scavenging	Y	P. Logan; M. Levine, GSAF
25	1902.04.00	William Strathorn	M	30	FATAL, legs severed	Y	P. Logan; M. Levine, GSAF
26	1902.06.00	Thomas Houston	M	Unknown	FATAL	Y	Taranaki Herald, 12/28/1900
27	1902.06.02	John Thompson	M	Unknown	Thigh bitten, FATAL	Y	Otago Witness, 2/6/1901
28	1902.07.06	S. McKie, apprentice 1st class o	M	Unknown	Left thigh stripped of flesh 4" above the knee	N	J.A. Guthrie; Sun, 7/13/1913; V.M. Coppleson, p.264 al
29	1902.07.15	boy	M	Unknown		N	The Graphic, 6/29/1901
30	1902.08.08	Antonio Tornatori	M	20	Disappeared, but shark involvement unconfi	Y	C. Moore
		John Hendrick Adrian Chandler,	M	29	Right leg bitten & foot severed, right arm bit	Y	M. Levine, GSAF
		male	M	Unknown	FATAL, bitten on arms, chest & legs	Y	Bardanis citing Embros, 9/23/1901
		Dahkus, a Molussa Moro	M	Unknown	Right thigh bitten	N	J.A. Guthrie, M.D.; Newark Advocate, 5/24/1902; V.M.
		William Quince	M	10	Lacerations to torso & thigh	N	The Argus, 12/2/1901
		Charles Jones	M	16	Legs bitten	N	Brisbane Courier, 1/20/1902
		a soldier from the Natal Garrisc	M	Unknown	Possible drowning & scavenging. Remains w	Y	M. Levine, GSAF
		John Ogier	M	Unknown	FATAL	Y	The Advertiser, 1/25/1902
		male	M	Unknown	No injury, hooked shark bit trowsers. PROVOK	N	The Colonist 2/22/1902
		Neil Sorenson	M	Unknown	Probable drowning & scavenging	Y	M. Levine, GSAF
		Giorgos	M	Unknown	Bitten on hand and thigh	N	M. Bardanis
		Apy	M	Unknown	"Nose hanging by a threat, prints of shark's t	N	V.M. Coppleson, p.264
		Harry M. Speerman	M	Unknown	Shark bit his left arm after he grabbed its tail	N	New York Times, 7/7/1902
		male	M	Unknown	Face & arms injured by hooked shark PROVOC	N	C. Moore, GSAF

n=5,292

CASE STUDY: STOCK MARKET DATA

DATASET SUMMARY:

- *3-month sample of stock market data for 500 publically-traded companies*

DIMENSIONS & MEASURES:

- *Dimensions: Date, Symbol*
- *Measures: Open, High, Low, Close, Volume*

CONCEPTS COVERED:

- *Sorting & Filtering*
- *Conditional Formatting (Highlight Cells, Data Bars)*
- *Value Settings (% Difference From)*

	A	B	C	D	E	F	G
1	Date	Symbol	Open	High	Low	Close	Volume
2	8/21/2009	A	25.6	25.61	25.22	25.55	34758
3	8/21/2009	AA	12.64	12.73	12.49	12.56	338295
4	8/21/2009	AAPL	167.81	169.37	166.8	169.22	148597
5	8/21/2009	ABC	21.14	21.25	20.9	21.05	33179
6	8/21/2009	ABT	45.58	46	45.315	45.39	84699
7	8/21/2009	ACS	45.08	45.33	44.4	45.32	17241
8	8/21/2009	ADBE	32.49	32.93	32	32.84	51086
9	8/21/2009	ADI	28.21	28.44	27.64	28.42	64696
10	8/21/2009	ADM	28.12	28.75	28.07	28.67	40472
11	8/21/2009	ADP	38.26	39.11	37.8	39.07	41981
12	8/21/2009	ADSK	24.4	24.91	24.14	24.51	38523
13	8/21/2009	AEE	26.58	27.11	26.46	27.05	13171
14	8/21/2009	AEP	31.31	31.65	31.04	31.49	39739
15	8/21/2009	AES	14.04	14.32	13.91	14.26	55350
16	8/21/2009	AET	29.89	30.34	29.38	29.62	60724
17	8/21/2009	AFL	40.56	42.2	40.3	41.87	58637
18	8/21/2009	AGN	55.71	56.24	55	55.43	19968
19	8/21/2009	AIG	34.42	35	32.53	32.85	493973
20	8/21/2009	AIV	11.46	12.06	11.41	11.95	36058
21	8/21/2009	AIZ	28.51	29.33	28.51	29.24	8827
22	8/21/2009	AKAM	18.07	18.5	17.955	18.42	44253
23	8/21/2009	AKS	20.75	21.12	20.724	20.87	53273
24	8/21/2009	ALL	28.22	28.77	27.85	28.63	39759
25	8/21/2009	ALTR	19.36	19.5	19.15	19.48	54580
26	8/21/2009	AMAT	13.53	13.75	13.32	13.74	159825
27	8/21/2009	AMD	3.53	3.71	3.51	3.7	201395
28	8/21/2009	AMGN	60.71	61.01	59.7	60.64	66052
29	8/21/2009	AMP	29.25	29.87	29	29.82	23186
30	8/21/2009	AMT	33.19	33.47	32.85	33.12	31521
31	8/21/2009	AMZN	84.88	85.06	83.54	85	61312

n=29,440

CASE STUDY: BASEBALL TEAM STATS

DATASET SUMMARY:

- Major League Baseball team statistics by season, 1995-2015

DIMENSIONS & MEASURES:

- Dimensions:** Season Start, Year, League, Team (Short), Team (Full), Division, DivWin, WCWin, LgWin, WSWin
- Measures:** G, W, L, RS, AB, H, 2B, 3B, HR, BB, SO, SB, CS, RA, ER, ERA, CG, SHO, SV

CONCEPTS COVERED:

- Sorting & Filtering
- PivotCharts & Slicers
- Calculated Fields

	A	B	C	D	E	F	G	H	I	J																		
1	Season Start	Year	League	Team (Shor	Team (Full)	Division	DivWin	WCWin	LgWin	WSWin																		
2	4/1/1995	1995	NL	ATL	Atlanta Braves	E	Y	N	Y	Y																		
3	4/1/1995	1995	AL	BAL	Baltimore Orioles	E	N	N	N	N																		
4	4/1/1995	1995	AL	BOS	Boston Red Sox	E	Y	N	N	N																		
5	4/1/1995	1995	AL	CAL	California Angels	W	N	N	N	N																		
6	4/1/1995	1995	AL	CHA	Chicago White Sox	C	N	N	N	N																		
7	4/1/1995	1995	NL	CHN	Chicago Cubs	C	N	N	N	N																		
8	4/1/1995	1995	NL	CIN	Cincinnati Reds	C	Y	N	N	N																		
9	4/1/1995	1995	AL	CLE	Cleveland Indians	C	Y	N	Y	N																		
10	4/1/1995	1995	NL	COL	Colorado Rockies	W	N	Y	N	N																		
11	4/1/1995	1995	AL	DET	Detroit Tigers	E	N	N	N	N																		
12	4/1/1995	1995	NL	FLO	Florida Marlins	E	N	N	N	N																		
13	4/1/1995	1995	NL	HOU	Houston Astros	C	N	N	N	N																		
14	4/1/1995	1995	AL	KCA	Kansas City Royals	C	N	N	N	N																		
15	4/1/1995	1995	NL	LAN	Los Angeles Dodgers	W	Y	N	N	N																		
16	4/1/1995	1995	AL	MIN	Minnesota Twins	C	N	N	N	N																		
17	4/1/1995	1995	AL	ML4	Milwaukee Brewers	C	N	N	N	N																		
18	4/1/1995	1995	NL	MON	Montreal Expos	E	N	N	N	N																		
19	4/1/1995	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC								
20	4/1/1995	G	W	L	RS	AB	H	2B	3B	HR	BB	SO	SB	CS	RA	ER	ERA	CG	SHO	SV								
21	4/1/1995	144	90	54	645	4814	1202	210	27	168	520	933	73	43	540	493	3.44	18	11	34								
22	4/1/1995	144	71	73	704	4837	1267	229	27	173	574	803	92	45	640	607	4.31	19	10	29								
23	4/1/1995	144	86	58	791	4997	1399	286	31	175	560	923	99	44	698	630	4.39	7	9	39								
24	4/1/1995	145	78	67	801	5019	1390	252	25	186	564	889	58	39	697	645	4.52	8	9	42								
25	4/1/1995	145	68	76	755	5060	1417	252	37	146	576	767	110	39	758	692	4.85	12	4	36								
26	4/1/1995	144	73	71	693	4963	1315	267	39	158	440	953	105	37	671	597	4.13	6	12	45								
27	4/1/1995	144	85	59	747	4903	1326	277	35	161	519	946	190	68	623	577	4.03	8	10	38								
28	4/1/1995	144	100	44	840	5028	1461	279	23	207	542	766	132	53	607	554	3.83	10	10	50								
29	4/1/1995	144	77	67	785	4994	1406	259	43	200	484	943	125	59	783	711	4.97	1	1	43								
30	4/1/1995	144	60	84	654	4865	1204	228	29	159	551	987	73	36	844	778	5.49	5	3	38								
31	4/1/1995	143	67	76	673	4886	1278	214	29	144	517	916	131	53	673	610	4.27	12	7	29								
32	4/1/1996	144	76	68	747	5097	1403	260	22	109	566	992	176	60	674	595	4.06	6	8	32								
33	4/1/1996	144	70	74	629	4903	1275	240	35	119	475	849	120	53	691	643	4.49	11	10	37								
34		144	78	66	634	4942	1303	191	31	140	468	1023	127	45	609	527	3.66	16	11	37								
35		144	56	88	703	5005	1398	270	34	120	471	916	105	57	889	814	5.76	7	2	27								
36		144	65	79	740	5000	1329	249	42	128	502	800	105	40	747	689	4.82	7	4	31								
37		144	66	78	621	4905	1268	265	24	118	400	901	120	49	638	586	4.11	7	9	42								
38		145	79	65	749	4947	1365	280	34	122	625	851	50	30	688	651	4.56	18	5	35								
39		144	69	75	657	4958	1323	218	34	125	446	994	58	39	618	557	3.88	9	9	36								
40		144	67	77	730	4916	1296	228	18	169	565	911	112	46	761	697	4.93	8	4	34								
41		144	69	75	615	4950	1296	263	30	94	497	884	72	25	658	603	4.21	8	8	41								
42		144	58	86	629	4937	1281	245	27	125	456	972	84	55	736	666	4.7	11	7	29								
43		144	70	74	668	4950	1345	231	20	116	447	872	124	46	672	589	4.13	6	10	35								
44		145	79	66	796	4996	1377	276	20	182	549	871	110	41	708	644	4.5	9	8	39								
45		144	67	77	652	4971	1256	229	33	152	472	1060	138	46	776	698	4.86	12	5	34								

n=624

CASE STUDY: SAN DIEGO BURRITO RATINGS

DATASET SUMMARY:

- Burrito ratings and Yelp reviews from 65 San Diego restaurants in 2016*

DIMENSIONS & MEASURES:

- Dimensions:** Location, Burrito, Date, Recommendation, Reviewer, Notes
- Measures:** Yelp Rating, Cost, Tortilla (0-5), Temp (0-5), Fillings (0-5), Meat Volume (0-5), Uniformity (0-5), Salsa (0-5), Synergy (0-5), Wrap Quality (0-5)

CONCEPTS COVERED:

- Calculating with COUNT
- Summarize Values By (SUM, AVERAGE)
- Show Values As (Rank)
- Conditional Formatting

	A	B	C	D	E	F					
1	Location	Burrito	Date	Recommendation	Reviewer	Notes					
2	Donato's taco shop	California	1/18/2016		Scott	good fries: 4/5					
3	Oscar's Mexican food	California	1/24/2016		Scott	Fries: 3/5; too little meat					
4	Oscar's Mexican food	Carnitas	1/24/2016		Emily						
5	Oscar's Mexican food	Carne asada	1/24/2016		Ricardo	Go to average burrito place like Rigoberto's in la jolla; Terrible tamales					
6	Pollos Maria	California	1/27/2016	Yes	Scott						
7	Pollos Maria	combo chicken	1/28/2016		Emily						
8	Nico's Taco Shop	California	1/30/2016	No	Scott	not fries. big potatoes					
9	Nico's Taco Shop	Carnitas	1/30/2016		Emily						
10	Los Primos Mexican Food	Monster California	2/1/2016		Scott	this tasted really bad leftover. not included in rating					
11	JV's Mexican Food	Carne Asada	2/6/2016	No	Scott						
12	JV's Mexican Food	Surf & Turf	2/6/2016		Emily	Huge. Shrimp is good. Meat is normal					
13	Tony's Fresh Mexican Food	Chile verde pork	2/11/2016		Marc						
14		G	H	I	J	K	L	M	N	O	P
15	Tony's Fresh Mexican	Yelp Rating	Cost	Tortilla (0-5)	Temp (0-5)	Fillings (0-5)	Meat Volume (0-5)	Uniformity (0-5)	Salsa (0-5)	Synergy (0-5)	Wrap Quality (0-5)
16	Tony's Fresh Mexican	3.5	6.49	3	5	3.5	4	4	4	4	4
17	Taco Stand	3.5	5.45	2	3.5	2.5	2	4	3.5	2.5	5
18	Taco Stand		4.85	3	2	3	4.5	4	3	3	5
19	Graciela's Taco Shop		5.25	3	2	3	4	5	4	4	5
20	Graciela's Taco Shop	4	6.59	4	5	3.5	4.5	5	2.5	4.5	4
21	Rigoberto's Taco Shop		6.99	3	4	3.5	2.5	2.5	2.5	4	1
22	Rigoberto's Taco Shop	3	7.19	2	3	2	2.5	2.5		2	3
23	Lolita's taco shop		6.99	2.5	3	2.5	3	3.5		2.5	3
24	Lolita's taco shop	3	9.25	2	4.5	3.5	1.5	3	3.5	4	2
25	Taco Stand		6.25	2.5	1.5	3	4.5	3	1.5	2	4.5
26	Taco Stand	4	9.5	2.5	2.5	2.5	2.5	2	0.5	3	3.5
27	Lola's 7 Up Market &	3	6.95	3	4	3	4	4	1	2	1
28	Lola's 7 Up Market &		6.25	3	3.5	4	2	3.5	1	4	4
29	Colima's Mexican Foo		6.99	3	1	2.5	4	4	3	4.5	5
30	Colima's Mexican Foo		6.25	4		2	4	4		3	4
		4.5	7.49	3	2.5	4	3.5	2.5	3.5	5	4.5
			8.49	4	4	4	5	4.5	3.5	4	2
		4	5.99	4	4	3.5	4	4.5	4	4	4.5
			5.99	3.5	4		4		4	4	1.5
		2.5	6.4	3	4	3	4	2	2		5
			6.4	3.5	3	3	4	4	1.5		4.5
		4	8.75	1.5	2	3.5	4	1	3.5	4.5	4
			5.5	1.5	2.5	3	4	1.5	2.5	3.5	4.5
			7.49	4	3	4	4	4	4	4	3
			7.49	3	2	4	4	3.5	3	4.5	4.5

n=237

CASE STUDY: DAILY WEATHER CONDITIONS

DATASET SUMMARY:

- *Daily weather conditions in Boston, Massachusetts from Jan-Dec 2016*

DIMENSIONS & MEASURES:

- **Dimensions:** *Date, Conditions*
- **Measures:** *Max Temp (F), Mean Temp (F), Min Temp (F), Max Wind Speed (MPH), Precipitation (in)*

CONCEPTS COVERED:

- *Sorting & Filtering*
- *PivotCharts*
- *Date Grouping*
- *Calculating with COUNT*

	A	B	C	D	E	F	G
1	Date	Conditions	Max Temp (F)	Mean Temp (F)	Min Temp (F)	Max Wind Speed (MPH)	Precipitation (in)
2	1/1/2016	Clear	41	39	33	32	0
3	1/2/2016	Clear	40	35	31	28	0
4	1/3/2016	Clear	44	36	31	28	0
5	1/4/2016	Clear	36	30	14	28	0
6	1/5/2016	Clear	26	16	8	23	0
7	1/6/2016	Clear	45	30	21	21.9	0
8	1/7/2016	Clear	43	33	26	18.1	0
9	1/8/2016	Clear	42	35	30	23	0
10	1/9/2016	Rain	41	40	38	18.1	0.01
11	1/10/2016	Rain	58	45	38	38.9	1.38
12	1/11/2016	Clear	51	40	25	38	0
13	1/12/2016	Snow	37	29	21	23	0.08
14	1/13/2016	Clear	33	29	21	47	0
15	1/14/2016	Clear	30	24	21	23	0
16	1/15/2016	Clear	42	31	26	17	0
17	1/16/2016	Rain	43	39	34	28	1.22
18	1/17/2016	Snow	38	35	29	21	0.1
19	1/18/2016	Snow	29	27	19	42.9	0.11
20	1/19/2016	Clear	25	20	16	45	0
21	1/20/2016	Clear	33	24	19	38	0
22	1/21/2016	Clear	33	27	21	35.1	0
23	1/22/2016	Clear	32	24	19	31.1	0
24	1/23/2016	Snow	32	29	20	45	0.37
25	1/24/2016	Clear	36	25	18	32	0
26	1/25/2016	Clear	35	31	26	19.9	0

n=363

CASE STUDY: SPARTAN RACE FACEBOOK POSTS

DATASET SUMMARY:

- Spartan Race Facebook posts from Aug-Oct 2016*

DIMENSIONS & MEASURES:

- Dimensions:** Page, Date of Post, Post Copy, Link, Post Type, Hour of Post, Time of Day
- Measures:** Shares, Reactions, Likes, Comments

CONCEPTS COVERED:

- Show Values As (% of Column)*
- Calculated Fields*
- Calculating with COUNT*

	A	B	C	D
1	Page	Date of Post	Post Copy	Link
2	Spartan Race	8/30/2016	Find out tomorrow night how the sandbag carry will make or break the men's elite podium in the Penns...	https://www.facebook.com/spa
3	Spartan Race	8/30/2016	Through grit and determination, fearless battles and triumphs, this mountain has been annointed with...	https://www.facebook.com/spa
4	Spartan Race	8/30/2016	Tune in and work out with Epic Alexander Nicholas at Epic Hybrid Training for today's "Lunchtime Wor...	https://www.facebook.com/spa
5	Spartan Race	8/30/2016	Q&A with Epic Alexander Nicholas! Ask about his Lunchtime Workout routine or other ways to get fitne...	https://www.facebook.com/spa
6	Spartan Race	8/30/2016	"It's an opportunity to learn from [Amanda], to learn that spirit." - Amelia BooneSpartan Pro, Ame...	https://www.facebook.com/spa
7	Spartan Race	8/31/2016	Suns out guns out in Austin, Texas!! Spartan Strong host Evan Dollard talks about explosiveness when...	https://www.facebook.com/spa
8	Spartan Race	8/31/2016	Alyssa Hawley Grip and rip challenge workout! http://sprtn.im/WHYIRACE_2016	https://www.facebook.com/spa
9	Spartan Race	8/31/2016	There are a few simple do's and don'ts to avoid ankle pain, on and off the Spartan course.	http://sprtn.im/2bEWvP1
10	Spartan Race	8/31/2016	Every racer has a story, what's yours? #WHYIRACE http://sprtn.im/WHYIRACE_2016	https://www.facebook.com/spa
11	Spartan Race	8/31/2016	Join Spartan Pro Team member Cassidy Watton at Epic Hybrid Training in our "Lunchtime Workout" serie...	https://www.facebook.com/spa
12	Spartan Race	8/31/2016	Tired o	
13	Spartan Race	9/1/2016	The ea	
14	Spartan Race	9/1/2016	Meet C	
15	Spartan Race	9/1/2016	Sidelin	
16	Spartan Race	9/1/2016	Forget	
17	Spartan Race	9/1/2016	ASK EP	
18	Spartan Race	9/1/2016	#AROC	
19	Spartan Race	9/1/2016	IORF -	
20	Spartan Race	9/1/2016	0	
21	Spartan Race	9/1/2016	#tbt to	
22	Spartan Race	9/1/2016	Follow	
23	Spartan Race	9/1/2016	Coach	
24	Spartan Race	9/1/2016	Do you	
25	Spartan Race	9/2/2016	Coach	
26	Spartan Race	9/2/2016	Causin	
27	Spartan Race	9/2/2016	Sparta	
28	Spartan Race	9/2/2016	Join Sp	
29	Spartan Race	9/2/2016	Ask Sp	
30	Spartan Race	9/2/2016	BROCR	

1	Link	Post Type	Hour of Post	Time of Day	Shares	Reactions	Likes	Comments
2	https://www.facebook.com/spa	video	0	Late Night	252	470	444	25
3	https://www.facebook.com/spa	video	14	Afternoon	129	399	382	18
4	https://www.facebook.com/spa	video	15	Evening	46	416	388	46
5	https://www.facebook.com/spa	video	15	Evening	15	202	193	25
6	https://www.facebook.com/spa	video	23	Late Night	440	1046	879	48
7	https://www.facebook.com/spa	video	0	Late Night	26	382	358	81
8	https://www.facebook.com/spa	video	13	Afternoon	73	600	544	105
9	http://sprtn.im/2bEWvP1	link	14	Afternoon	60	252	246	31
10	https://www.facebook.com/spa	photo	15	Evening	63	604	560	24
11	https://www.facebook.com/spa	video	15	Evening	27	377	353	43
12		status	20	Evening		100	88	86
13	http://apple.co/2c2iQ7M	link	4	Late Night	14	119	116	7
14	https://www.facebook.com/spa	video	13	Afternoon	28	352	321	45
15	http://bit.ly/2bbLAH1	link	14	Afternoon	5	52	50	0
16	https://www.facebook.com/spa	video	15	Evening	49	278	249	30
17	https://www.facebook.com/spa	video	16	Evening	5	229	209	42
18	https://www.facebook.com/spa	photo	18	Evening	331	4862	3633	101
19	https://www.facebook.com/Che	video	18	Evening		7	6	0
20	https://www.facebook.com/eve	event	18	Evening		192	188	1
21	https://www.facebook.com/spa	video	21	Evening	56	257	239	7
22	https://www.facebook.com/spa	video	23	Late Night	129	1236	1178	14
23	https://www.facebook.com/spa	video	23	Late Night	28	383	344	43
24	https://www.facebook.com/suff	video	23	Late Night	1	727	647	97
25	https://www.facebook.com/spa	video	14	Afternoon	34	284	260	34
26	https://www.facebook.com/spa	photo	15	Evening	9	317	308	6
27	https://www.facebook.com/spa	video	15	Evening	10	179	160	38
28	https://www.facebook.com/spa	video	15	Evening	23	241	227	16
29	https://www.facebook.com/spa	video	16	Evening	10	376	341	41

n=393

CASE STUDY: APPLE APP DATA

DATASET SUMMARY:

- Details and descriptions for 7,000+ mobile apps available on the Apple App Store

DIMENSIONS & MEASURES:

- Dimensions:** App ID, App Name, Size, Currency, Price, Age Rating, Primary Genre
- Measures:** Total Ratings, Total Avg Rating, Current Version Ratings, Current Avg Rating, Supported Devices, # of Screenshots, Supported Languages

CONCEPTS COVERED:

- Sorting & Filtering
- Calculated Fields
- Show Values As (% of Column, % of Parent)
- Conditional Formatting

	A	B			C	D	E	F	G
1	App ID	App Name			Size (Bytes)	Currency	Price	Age Range	Primary Genre
2	281656475	PAC-MAN Premium			100788224	USD	3.99	4+	Games
3	281796108	Evernote - stay organized			158578688	USD	0	4+	Productivity
4	281940292	WeatherBug - Local Weather, Radar, Maps, Alerts			100524032	USD	0	4+	Weather
5	282614216	eBay: Best App to Buy, Sell, Save! Online Shopping			128512000	USD	0	12+	Shopping
6	282935706	Bible			92774400	USD	0	4+	Reference
7	283619399	Shanghai Mahjong			10485713	USD	0.99	4+	Games
8	283646709	PayPal - Send and request money safely			227795968	USD	0	4+	Finance
9	284035177	Pandora - Music & Radio			130242560	USD	0	12+	Music
10	284666222	PCalc - The Best Calculator			49250304	USD	9.99	4+	Utilities
11	284736660	Ms. PAC-MAN			70023168	USD	3.99	4+	Games
12	284791396	Solitaire by MobilityWare			49618944	USD	4.99	4+	Games
13	284815117	SCRABBLE Premium			227547136	USD	7.99	4+	Games
14	284815942	Google " Search made just for mobile			179979264	USD	0	17+	Utilities
15	284847138	Bank of America - Mobile Banking			160925696	USD	0	4+	Finance
16	28486276		H	I	J	K	L	M	N
17	28487679	1	Total Ratings	Avg Rating	Current Version Ratings	Current version Avg Rating	Supported Devices	Number of Screenshots	Supported Languages
18	28488221	2	21292	4	26	4.5	38	5	10
19	28491035	3	161065	4	26	3.5	37	5	23
20	28499345	4	188583	3.5	2822	4.5	37	5	3
21	28500546	5	262241	4	649	4.5	37	5	9
22	28594605	6	985920	4.5	5320	5	37	5	45
23	28599415	7	8253	4	5516	4	47	5	1
24	28605881	8	119487	4	879	4.5	37	0	19
25	28607047	9	1126879	4	3594	4.5	37	4	1
26	28679960	10	1117	4.5	4	5	37	5	1
27	28690669	11	7885	4	40	4	38	0	10
		12	76720	4.5	4017	4.5	38	4	11
		13	105776	3.5	166	2.5	37	0	6
		14	479440	3.5	203	4	37	4	33
		15	119773	3.5	2336	4.5	37	0	2
		16	6340	4.5	668	4.5	38	5	2
		17	56194	4	87	3.5	37	1	26
		18	2974676	3.5	212	3.5	37	1	29
		19	223885	4	3726	4.5	37	5	18
		20	402925	4	136	4.5	37	3	16
		21	31456	4	4178	3.5	47	0	1
		22	2929	4.5	966	4.5	43	0	2
		23	11447	5	781	5	40	5	1
		24	137951	4	131	4.5	37	2	6

n=7,197

CASE STUDY: WINE TASTING SCORES

DATASET SUMMARY:

- *Data from 130,000 wine tastings, including locations, wine descriptions, points and price*

DIMENSIONS & MEASURES:

- **Dimensions:** Country, Province, Region, Subregion, Winery, Variety, Wine Name, Taster Name, Taster Twitter Handle, Description
- **Measures:** Points, Price

CONCEPTS COVERED:

- *Sorting & Filtering*
- *Value Grouping*
- *PivotCharts*

	A	B	C	D	E	F
1	Country	Province	Region	Subregion	Winery	Variety
2	Spain	Central Spain	Vino de la Tierra de Castilla		Felix Solis	Syrah
3	US	California	Clarksburg	Central Valley	Dancing Coyote	White Blend
4	Argentina	Mendoza Province	Mendoza		Broke Ass	Malbec-Syrah
5	US	California	California	California Other	Bandit	Chardonnay
6	US	California	California	California Other	Pam's Cuties	Chardonnay
7	Spain	Levante	Yecla		Terrenal	Cabernet Sauvignon
8	US	California	California	California Other	Bandit	Merlot
9	US	California	California	California Other	Bandit	Merlot
10	Spain	Levante	Yecla		Terrenal	Tempranillo
11	Spain	Central Spain	Vino de la Tierra de Castilla		Felix Solis	White Blend
12	Romania	Viile Timisului			Cramele Recas	Pinot Grigio
13	Portugal	Alentejano			Herdade dos Machados	Portuguese Red
14	Italy	Veneto	Prosecco		Anna Spinato	Glera
15	Portugal	Vinho Verde			Adega Cooperativa Ponte de Barca	Rosão
16	France	Vin de France	Vin de France		Belle Made For You	Cabernet Sauvignon
17	France					
18	Chile					
19	US					
20	US					
21	US					
22	Argentina					
23	Chile					
24	Portugal					
25	US					
26	US					
27	Spain					
28	US					
29	US					

	G	H	I	J	K	L
1	Wine Name	Taster Name	Taster Twitter Handle	Description	Points	Price
2	Felix Solis 2013 Flirty Bird Syrah (Vino de la Tierra de Castilla)	Michael Schachner	@wineschach	Berry and cherry aromas are surprisingly sturdy and clean. Freshness is me	85	4
3	Dancing Coyote 2015 White (Clarksburg)	Jim Gordon	@gordone_cellars	Fruity, soft and rather sweet, this wine smells and tastes like apple and pe	85	4
4	Broke Ass 2009 Red Malbec-Syrah (Mendoza)	Michael Schachner	@wineschach	Crimson in color but also translucent, with a candied, slightly green nose.	84	4
5	Bandit NV Chardonnay (California)			Packaged in a cute yellow recyclable Tetrapak, this easy Chard is sweet in	84	4
6	Pam's Cuties NV Unoaked Chardonnay (California)	Jim Gordon	@gordone_cellars	Sweet and fruity, this canned wine feels soft and syrupy, with sugary pear	83	4
7	Terrenal 2010 Cabernet Sauvignon (Yecla)	Michael Schachner	@wineschach	This opens with standard cherry and berry aromas before transitioning to	84	4
8	Bandit NV Merlot (California)			There's a lot going on in this Merlot, which is likeable now for its rich black	86	4
9	Bandit NV Merlot (California)			A good everyday Merlot, dry and rich in tannins, with pleasant cherry, coc	84	4
10	Terrenal 2010 Estate Bottled Tempranillo (Yecla)	Michael Schachner	@wineschach	Nice on the nose, this has a leafy note and a mellow red-berry aroma. Bo	84	4
11	Felix Solis 2012 Flirty Bird White (Vino de la Tierra de Castilla)	Michael Schachner	@wineschach	Tropical fruit and citrus aromas aren't bad, but the palate is heavy. The fle	82	4
12	Cramele Recas 2011 UnWineD Pinot Grigio (Viile Timisului)	Anna Lee C. Iijima		Notes of sun-dried hay and green flower highlight the nose and palate of	186	4
13	Herdade dos Machados 2009 Morgado da Canita Red (Alentejano)	Roger Voss	@vossroger	This feels very ripe, perhaps overripe, with its seemingly sweet flavor of bl	84	5
14	Anna Spinato NV Mini (Prosecco)			Packaged in a pocket-friendly 187-ml bottle, this is fragrant and simple, wi	86	5
15	Adega Cooperativa Ponte de Barca 2010 Escolha Rosão (Vinho Verde)	Roger Voss	@vossroger	On the dry side, with caramel and strawberry flavors, this is an attractive,	83	5
16	Belle Made For You NV Cabernet Sauvignon (Vin de France)	Lauren Buzzeo	@laurbuzz	This is a jammy and fruit-forward selection, with direct aromas and flavor	83	5
17	Belle Made For You NV Red (Vin de France)	Lauren Buzzeo	@laurbuzz	This blend of 70% Grenache and 30% Carignan is smooth and easy to drin	83	5
18	San Pedro 2002 Gato Negro Cabernet Sauvignon (Central Valley)	Michael Schachner	@wineschach	Dusty, peppery aromas carry little richness, but in the mouth things turn m	83	5
19	Earth's Harvest 2014 Organic Grapes Chardonnay (California)	Jim Gordon	@gordone_cellars	This wine has a deep-gold color, attractive baking-spice and buttered pop	85	5
20	Mancan NV Red (California)	Jim Gordon	@gordone_cellars	This wine's intense grapey, jammy aromas lead to very fruity and blackber	84	5
21	Gallo Family Vineyards NV Twin Valley Pinot Grigio (California)			A very nice everyday wine, bone dry and savory in acidity. Shows polished	85	5
22	Terrenal 2013 Estate Bottled Malbec (Mendoza)	Michael Schachner	@wineschach	Candied plum and red berry aromas smell like red licorice. Flavors are rais	80	5
23	In Situ 2008 Reserva Sauvignon Blanc (Aconcagua Valley)	Michael Schachner	@wineschach	More than decent; this is good SB with no bells and whistles but lots of str	87	5
24	Adega Cooperativa do Cartaxo 2012 Xairel Red (Tejo)	Roger Voss	@vossroger	This is a fruity, fresh, forward wine that has delicious red berry fruitiness a	85	5
25	Gallo Family Vineyards NV Twin Valley White Zinfandel (California)			Overtly off-dry to sweet, but marked by high acidity and a bitterness that	83	5
26	Gallo Family Vineyards 2005 Twin Valley Chardonnay (California)			Pretty simple, but gets the job done with a creamy texture and peach and	83	5
27	Viãsa Decana 2010 Crianza Tempranillo (Utiel-Requena)	Michael Schachner	@wineschach	Raspberry and plum aromas lead to a jammy, pruny palate with no structu	81	5
28	Earth's Harvest 2014 Organic Grapes Chardonnay (California)	Jim Gordon	@gordone_cellars	This wine has a deep-gold color, attractive baking-spice and buttered pop	85	5
29	Mancan NV White (California)	Jim Gordon	@gordone_cellars	This canned white is slightly dark in color, smells and tastes nicely fruity ar	85	5

n=129,971