

CIS<4400>

<Section PTR A>

<CIS 4400 PROJECT>

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<12/20/2019>

Narrative Description:

The problem presented in our data is to figure out where and how often crimes occur in Boston in order to try to prevent crime in the future. We are looking to find patterns and common similarities that occur during certain conditions to advise civilians to be more cautious or to avoid certain areas. We are deciding to use the Boston offenses and other open data from Kaggle.

Identification of the Information needs:

In specific we are planning to use Boston weather from 2012-2018, Boston police stations, community center pool, crime incident reports 2015-to-date, hospital locations and potentially colleges and universities.

KPIS :

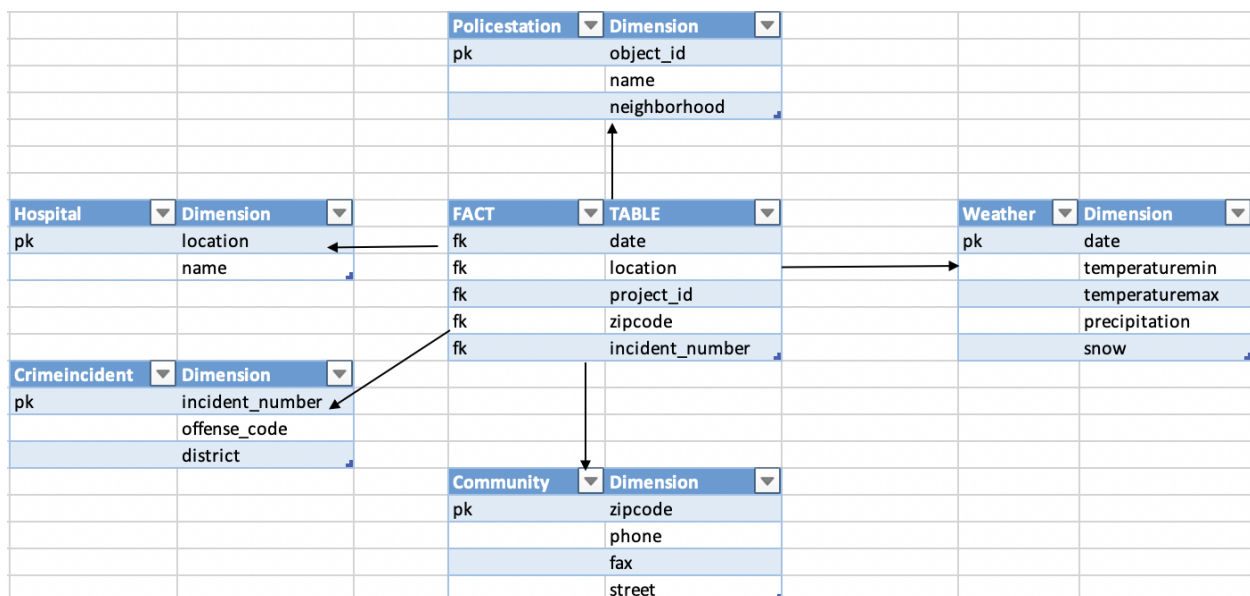
Which street is the most dangerous based on crimes? top 10?

What is the most common crime in Boston? is it the same as the previous year?

Which College is nearest/Furthest from the most crime in Boston?

What is the safest non-public and public school?

Which season do most crimes happen ? Dangerous crimes? not-so dangerous crimes?

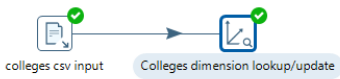


ETL PROCESS:

Colleges csv:

LoggingExecution HistoryStep MetricsPerformance GraphMetricsPreview data

#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	colleges csv input	0	0	60	61	0	0	0	0	Finished	0.0s	6,778	-
2	Colleges dimension lookup/update	0	60	60	60	60	0	0	0	Finished	0.1s	618	-



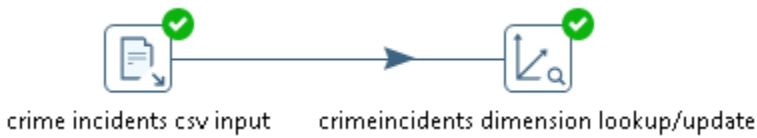
Execution Results

LoggingExecution HistoryStep MetricsPerformance GraphMetricsPreview data

First rowsLast rowsOff

#	OBJECTID	Match_type	Id	Name	Address	City	Zipcode
1	1	NCES	98627	Massachusetts General Hospital Dietetic Internship	Fruit St, Boston, Massachusetts 02114	West End	365190
2	2	NCES & Consortium	11959	Suffolk University	8 Ashburton Pl Beacon Hill, Boston, Massachusetts 02108	Boston	149016
3	3	NCES & Consortium	16632	Benjamin Franklin Institute of Technology	41 Berkeley St, Boston, Massachusetts 02116	South End	78750
4	4	NCES & Consortium	1949	Bunker Hill Community College	250 New Rutherford Ave, Boston, Massachusetts 02129	Charlestown	203509
5	5	NCES & Consortium	9109	MGH Institute of Health Professions	36 1st Avenue, Boston, Massachusetts 02129	Charlestown	70077
6	6	NCES & Consortium	86640	Emmanuel College	400 Fenway, Massachusetts 02115	Fenway/Kenmore	52212
7	7	NCES & Consortium	86302	School of the Museum of Fine Arts-Boston	230 The Fenway, Boston, Massachusetts 02115	Fenway/Kenmore	113496
8	8	NCES & Consortium	86125	Simmons	300 Fenway, Boston, Massachusetts 02115	Fenway/Kenmore	240740
9	9	NCES & Consortium	15422	Boston University	One Silber Way, Boston, Massachusetts 02215	Fenway/Kenmore	593154
10	10	NCES & Consortium	22285	The Boston Conservatory	8 Fenway, Boston, Massachusetts 02215	Fenway/Kenmore	35350
11	11	NCES	86683	Wheelock College	200 the Riverway, Boston, Massachusetts 02215	Fenway/Kenmore	75256
12	12	NCES	89176	Roxbury Community College	1234 Columbus Ave, Roxbury Crossing, Massachusetts 02120	Roxbury	144812
13	13	NCES & Consortium	91520	University of Massachusetts-Boston	100 Morrissey Blvd, Boston, Massachusetts 02125	North Dorchester	264200
14	14	Consortium	15399	Boston University Research	771 Commonwealth Ave	Fenway/Kenmore	0
15	15	Consortium	15400	Boston University School of Law	1 University Rd	Fenway/Kenmore	54767
16	16	Consortium	15282	Boston University Sargent College	635 Commonwealth Ave	Fenway/Kenmore	85902
17	17	Consortium	16275	Boston University School of Management	595 Commonwealth Ave	Fenway/Kenmore	12908
18	18	Consortium	16291	Boston University Admissions	121 Bay State Rd	Fenway/Kenmore	13055
19	19	Consortium	16267	Boston University Rental Office	19 Deerfield Rd	Fenway/Kenmore	0
20	20	Consortium	84599	Boston University Trustees	25 Buick Street	Allston/Brighton	122743

Crime incidents csv:



Execution Results

LoggingExecution HistoryStep MetricsPerformance GraphMetricsPreview data

#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	crime incidents csv input	0	0	575226	575227	0	0	0	0	Finished	7mn 46s	1,232	-
2	crimeincidents dimension lookup/update	0	575226	575226	575226	575226	0	0	0	Finished	7mn 57s	1,205	-

Execution Results

Logging Execution History Step Metrics Performance Graph Metrics Preview data													
First rows Last rows Off													
#	Count	DAY_OF_WEEK	DISTRICT	HOUR	Lat	Long	MONTH	OCCURRED_ON_DATE	OFFENSE_CODE_GROUP	REPORTING_AREA	SHOOTING	UCR_PART	YEAR
1	0	Sunday	2	6	42.3	-71.1	7	7/8/2012 6:00	Residential Burglary	629	0	1	2012
2	1	Sunday	1	6	42.3	-71.1	7	7/8/2012 6:03	Aggravated Assault	327	1	1	2012
3	2	Sunday	2	6	42.3	-71.1	7	7/8/2012 6:26	Robbery	625	0	1	2012
4	3	Sunday	1	6	42.3	-71.1	7	7/8/2012 6:56	Other	258	0	1	2012
5	4	Sunday	9	7	42.3	-71.1	7	7/8/2012 7:15	Robbery	496	0	1	2012
6	5	Sunday	3	7	42.3	-71.1	7	7/8/2012 7:32	Robbery	249	1	1	2012
7	6	Sunday	1	7	42.3	-71.1	7	7/8/2012 7:50	Robbery	295	0	1	2012
8	7	Sunday	4	7	42.3	-71.1	7	7/8/2012 7:50	Simple Assault	123	0	2	2012
9	8	Sunday	7	7	42.4	-71.2	7	7/8/2012 7:53	Medical Assistance	759	0	3	2012
10	9	Sunday	9	8	42.3	-71.1	7	7/8/2012 8:05	Medical Assistance	494	0	3	2012
11	10	Sunday	2	8	42.3	-71.1	7	7/8/2012 8:10	Other	626	0	1	2012
12	11	Sunday	3	8	42.3	-71.1	7	7/8/2012 8:15	Violations	252	0	2	2012
13	12	Sunday	4	9	42.3	-71.1	7	7/8/2012 9:00	Fraud	125	0	2	2012
14	13	Sunday	2	9	42.3	-71.1	7	7/8/2012 9:30	Property Found	162	0	3	2012
15	14	Sunday	4	9	42.4	-71.1	7	7/8/2012 9:30	Investigate Person	103	0	3	2012
16	15	Sunday	7	9	42.3	-71.1	7	7/8/2012 9:45	Towed	792	0	3	2012
17	16	Sunday	4	9	42.4	-71.1	7	7/8/2012 9:47	Violations	91	0	2	2012
18	17	Sunday	6	9	42.3	-71.1	7	7/8/2012 9:53	Towed	221	0	3	2012
19	18	Sunday	1	9	42.3	-71.1	7	7/8/2012 9:55	Other	296	0	2	2012
20	19	Sunday	2	10	42.3	-71.1	7	7/8/2012 10:00	Investigate Property	273	0	3	2012
21	20	Sunday	1	10	42.3	-71.1	7	7/8/2012 10:00	Medical Assistance	296	0	3	2012
22	21	Sunday	1	10	42.3	-71.1	7	7/8/2012 10:00	Investigate Person	311	0	3	2012
23	22	Sunday	8	10	42.3	-71.1	7	7/8/2012 10:00	Drug Violation	574	0	2	2012
24	23	Sunday	1	10	42.3	-71.1	7	7/8/2012 10:00	Violations	311	0	2	2012
25	24	Sunday	7	10	42.4	-71.1	7	7/8/2012 10:01	Other	796	0	2	2012
26	25	Sunday	9	10	42.3	-71.1	7	7/8/2012 10:34	Violations	497	0	2	2012
27	26	Sunday	2	11	42.3	-71.1	7	7/8/2012 11:00	Simple Assault	271	0	2	2012
28	27	Sunday	5	11	42.3	-71.1	7	7/8/2012 11:00	Residential Burglary	503	0	1	2012
29	28	Sunday	3	11	42.3	-71.1	7	7/8/2012 11:09	Violations	462	0	2	2012
30	29	Sunday	9	11	42.3	-71.1	7	7/8/2012 11:10	Missing Person Located	488	0	3	2012
31	30	Sunday	3	11	42.3	-71.1	7	7/8/2012 11:30	Violations	345	0	2	2012
32	31	Sunday	9	11	42.3	-71.1	7	7/8/2012 11:51	Violations	493	0	2	2012
33	32	Sunday	1	11	42.3	-71.1	7	7/8/2012 11:59	Medical Assistance	329	0	3	2012
34	33	Sunday	1	12	42.3	-71.1	7	7/8/2012 12:00	Property Lost	318	0	3	2012

Nonpublic School:



Execution Results

Logging Execution History Step Metrics Performance Graph Metrics Preview data													
#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	CSV file input	0	0	82	83	0	0	0	0	Finished	0.0s	5,187	-
2	nonpublic schools Dimension lookup/update	0	82	82	82	82	0	0	0	Finished	0.1s	707	-

Execution Results

Logging Execution History Step Metrics Performance Graph Metrics Preview data

First rows Last rows Off

#	Long	Lat	OBJECTID_1	OBJECTID	SCHID	NAME	ADDRESS	TOWN_MAIL	TOWN	STATE	ZIP	PRINCIPAL
1	-71.1	42.3	85	163	5300	Roxbury Prep - Mission Hill	120 Fisher Avenue	Roxbury	BOSTON	MA	2120	Dana Lehman
2	-71.1	42.3	86	153	5470	Helen Davis Leadership Academy Charter Public School	23 Leonard Street	Boston	BOSTON	MA	2122	Kamala Shenwood
3	-71.1	42.3	87	1100	350950	British School of Boston	416-420 Pond Street	Jamaica Plain	BOSTON	MA	2130	Bruce Robinson
4	-71.1	42.3	88	206	5230001	EDCO Collaborative - EDCO YOUTH ALT	650 Beacon St, 3rd Floor	Boston	BOSTON	MA	2215	
5	-71.1	42.2	89	134	5600	Academy Of the Pacific Rim Charter Public School	1 Westinghouse Plaza	Hyde Park	BOSTON	MA	2136	Jenne Colasacco
6	-71.1	42.3	90	136	5500	Boston Collegiate Charter School (Middle and High School)	11 Mayhew Street	Dorchester	BOSTON	MA	2125	Tobey Jackson
7	-71.1	42.3	91	137	5520	Boston Preparatory Charter Public School	885 River Street	Hyde Park	BOSTON	MA	2136	Amanda Colley
8	-71.1	42.3	92	138	5400	Boston Renaissance Charter Public School	1415 Hyde Park Avenue	Hyde Park	BOSTON	MA	2136	Roger Harris
9	-71.1	42.3	93	143	5440	Codman Academy Charter Public School	637 Washington Street	Dorchester	BOSTON	MA	2124	Thabiti Brown
10	-71.1	42.3	95	149	5450	Edward Brooke Charter School - Roslindale	190 Cummins Highway	Roslindale	BOSTON	MA	2131	Jon Clark
11	-71	42.4	96	151	5490	Excel Academy Charter School - East Boston	58 Moore St.	East Boston	BOSTON	MA	2128	Komal Bhasin
12	-71.1	42.4	97	157	5431	MATCH Charter Public High School	1001 Commonwealth Avenue	Boston	BOSTON	MA	2215	Jorge Miranda
13	-71.1	42.3	98	159	5700	Neighborhood House Charter School	21 Queen Street	Dorchester	BOSTON	MA	2122	Kevin Andrews
14	-71.1	42.3	99	166	5027	Cathedral High	78 Union Park	Boston	BOSTON	MA	2118	Christol March
15	-71.1	42.4	100	1521	350702	The Advent School	15 Birmer Street	Boston	BOSTON	MA	2108	Nicole A. DuFauchar
16	-71.1	42.4	101	106	8168	St John Elementary	9 Moon	Boston	BOSTON	MA	2113	Karen McLaughlin
17	-71.1	42.3	102	1128	350705	Beres SDA Academy	800 Morton St.	Mattapan	BOSTON	MA	2126	Grafton Jones
18	-71.1	42.3	103	178	8091	Pope John Paul II Academy (Lower Mills)	2200 Dorchester Avenue	Dorchester	BOSTON	MA	2124	George Milot
19	-71.1	42.3	104	179	8064	Pope John Paul II Academy (Mattapan)	120 Babson	Mattapan	BOSTON	MA	2126	Kathleen Aldridge
20	-71	42.4	105	180	8065	Pope John Paul II Academy (Neponset)	239 Neponset Avenue	Dorchester	BOSTON	MA	2122	Kate Brandley
21	-71.1	42.4	106	182	8103	Saint Joseph Preparatory High School	617 Cambridge	Brighton	BOSTON	MA	2135	Tom Numan
22	-71	42.4	107	183	8071	South Boston Catholic Academy	866 East Broadway	South Boston	BOSTON	MA	2127	Nancy Carr
23	-71.1	42.4	110	1523	350724	Commonwealth School	151 Commonwealth Avenue	Boston	BOSTON	MA	2116	William Wharton
24	-71.1	42.4	111	1524	350765	The Learning Project	107 Marlborough Street	Boston	BOSTON	MA	2115	Michael Mccord
25	-71.1	42.4	112	1525	350794	The Newman School	247 Marlborough Street	Boston	BOSTON	MA	2116	John Colahan
26	-71	42.4	113	169	8034	E Boston Central Catholic	69 London	East Boston	BOSTON	MA	2128	Maryann Manfredor
27	-71.1	42.3	114	1768	350785	Neighborhood School	34 Peter Parley Rd	Jamaica Plain	BOSTON	MA	2130	Tricia Morrow
28	-71.1	42.3	116	1770	350882	St Mary Of Czestochowa	655 Dorchester Avenue	South Boston	BOSTON	MA	2127	Marie Laclaire
29	-71.1	42.3	117	1771	350812	Paige Academy	28 Highland Avenue	Roxbury	BOSTON	MA	2119	Angela Cook
30	-71.1	42.3	118	175	8588	Nativity Prep School	39 Lamartine Street	Jamaica Plain	BOSTON	MA	02130-0947	Dan Roy
31	-71.1	42.3	119	174	<null>	Mission Grammar School	94 St Alphonsus	Roxbury	BOSTON	MA	2120	Alice Outson
32	-71.1	42.3	120	181	8060	Sacred Heart Elementary	1035 Canterbury	Roslindale	BOSTON	MA	2131	Monica Haldiman
33	-71.2	42.4	122	185	8077	St Columbkille Elem	25 Arlington Street	Brighton	BOSTON	MA	2135	Mary Battles
34	-71.2	42.3	123	167	8028	Catholic Memorial	235 Baker Street	West Roxbury	BOSTON	MA	2132	Richard Chisholm
35	-71.2	42.3	124	1851	350808	Roxbury Latin School	101 St Theresa Avenue	West Roxbury	BOSTON	MA	2132	F Jarvis
36	-71.1	42.3	125	1883	350778	Mother Caroline Academy	515 Blue Hill Avenue	Dorchester	BOSTON	MA	2121	Frances Butler
37	-71.1	42.3	126	1885	350740	Hollow Reed School	95 Sedawick Street	Jamaica Plain	BOSTON	MA	2130	Khabria Brown

Public schools:



#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	CSV file input	0	0	131	132	0	0	0	0	Finished	0.0s	22,000	-
2	public schools Dimension lookup/update	0	131	131	131	31	0	0	0	Finished	0.1s	1,489	-

Execution Results													
<div> <div>Logging</div> <div>Execution History</div> <div>Step Metrics</div> <div>Performance Graph</div> <div>Metrics</div> <div>Preview data</div> </div> <div> <div>First rows</div> <div>Last rows</div> <div>Off</div> </div>													
#	Long	Lat	OBJECTID_1	OBJECTID	BLDG_ID	BLDG_NAME	ADDRESS	CITY	ZIPCODE	CSP_SCH_ID	SCH_ID	SCH_NAME	SCH_LAB
1	-71	42.4	1	1	1	Guild Bldg	195 Leyden Street	East Boston	2128	4061	4061	Guild Elementary	Guild
2	-71	42.4	2	2	3	Kennedy, P Bldg	343 Saratoga Street	East Boston	2128	4541	4541	Kennedy/Patrick Elem	PJ Kennec
3	-71	42.4	3	3	4	Otis Bldg	218 Marion Street	East Boston	2128	4322	4322	Otis Elementary	Otis
4	-71	42.4	4	4	6	O'Donnell Bldg	33 Trenton Street	East Boston	2128	4543	4543	O'Donnell Elementary	O'Donnel
5	-71	42.4	5	5	7	East Boston High Bldg	86 White Street	East Boston	2128	1070	1070	East Boston High	East Bost
6	-71	42.4	6	6	8	Umana / Barnes Bldg	312 Border Street	East Boston	2128	4323	4323	Umana Academy	Umana A
7	-71	42.4	7	7	10	East Boston Eec Bldg	135 Gove Street	East Boston	2128	4450	4450	East Boston EEC	East Bost
8	-71	42.4	8	8	11	Mckay Bldg	122 Cottage Street	East Boston	2128	4360	4360	McKay K-8	McKay K-
9	-71	42.4	9	9	12	Adams Bldg	165 Webster Street	East Boston	2128	4361	4361	Adams Elementary	Adams
10	-71.1	42.4	10	10	13	Harvard-Kent	50 Bunker Hill Street	Charlestown	2129	4280	4280	Harvard/Kent Elem	Harvard/I
11	-71.1	42.4	11	11	14	Charlestown High Bldg #1 - Main	240 Medford Street	Charlestown	2129	1050	1050	Charlestown High	Charlesto
12	-71.1	42.4	12	12	15	Edwards Bldg	28 Walker Street	Charlestown	2129	2010	2010	Edwards Middle	Edwards I
13	-71.1	42.4	13	13	16	Warren-Prescott Bldg	50 School Street	Charlestown	2129	4283	4283	Warren/Prescott K-8	Warren/P
14	-71.1	42.4	14	14	17	Eliot Bldg	16 Charter Street	Boston	2113	4381	4381	Eliot K-8	Eliot K-8
15	-71.1	42.3	15	15	21	Abraham Lincoln Building	152 Arlington Street	Boston	2116	1450	1450	Quincy Upper School	Quincy U
16	-71.1	42.3	16	16	22	Boston HS Bldg	885 Washington Street	Boston	2111	4650	4650	Quincy Lower (K-5)	Quincy L
17	-71.1	42.4	17	17	24	Snowden Hs Bldg	150 Newbury Street	Boston	2116	1200	1200	Snowden International	Snowden
18	-71.1	42.3	18	18	26	McKinley Mackey Bldg	90 Warren Avenue	Boston	2116	1291	1291	McKinley Elementary	McKinley
19	-71.1	42.3	19	19	26	McKinley Mackey Bldg	90 Warren Avenue	Boston	2116	1294	1294	McKinley So. End Acad	McKinley
20	-71.1	42.3	20	20	27	Hurley Bldg	70 Worcester Street	Boston	2118	4260	4260	Hurley K-8	Hurley K-
21	-71.1	42.3	21	21	28	Blackstone Bldg	380 Shawmut Avenue	Boston	2118	4640	4640	Blackstone Elementary	Blackston
22	-71.1	42.3	22	22	31	Mason Bldg	150 Norfolk Avenue	Roxbury	2119	4121	4121	Mason Elementary	Mason
23	-71.1	42.3	23	23	33	Clap Bldg	35 Harvest Street	Dorchester	2125	4531	4531	Clap Elementary	Clap
24	-71.1	42.3	24	24	35	Perkins Bldg	50 Burke Street	South Boston	2127	4022	4022	Perkins Elementary	Perkins
25	-71	42.3	25	25	36	South Boston Ed. Bldg	95 G Street	South Boston	2127	1162	1162	Excel High	Excel HS
26	-71	42.3	26	27	37	Tynan Bldg	650 E. Fourth Street	South Boston	2127	4590	4590	Tynan Elementary	Tynan
27	-71	42.3	27	28	38	Perry Bldg	745 E. Seventh Street	South Boston	2127	4592	4592	Perry K-8	Perry K-8
28	-71.1	42.3	28	29	39	Russell Bldg	750 Columbia Road	Dorchester	2125	4530	4530	Russell Elementary	Russell
29	-71.1	42.3	29	30	42	Orchard Gardens K-8	906 Albany Street	Roxbury	2119	4680	4680	Orchard Gardens K-8	Orchard C
30	-71.2	42.3	30	32	131	West Roxbury Ed. Bldg	1205 V.F.W. Parkway	West Roxbury	2132	1256	1256	West Roxbury Academy	W. Roxbu
31	-71.1	42.3	31	34	34	Gavin Bldg	215 Dorchester Street	South Boston	2127	2450	2450	UP Academy Boston	UP Acade
32	-71.1	42.3	32	35	44	Wheatley Bldg	20 Kearsage Avenue	Roxbury	2119	1410	1410	Boston Day and Evening Academy	BDEA
33	-71.1	42.3	33	36	45	Carter Center Bldg	396 Northampton Street	Roxbury	2118	4261	4261	Carter Center	Carter Ce
34	-71.1	42.3	34	37	47	Madison Park Bldg #1	75 Malcolm X Blvd	Roxbury	2120	1210	1210	Madison Park High	Madison

Combined Baseball:



Execution Results													
<div> <div>Logging</div> <div>Execution History</div> <div>Step Metrics</div> <div>Performance Graph</div> <div>Metrics</div> <div>Preview data</div> </div>													
#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	combined baseball file input	0	0	1134	1135	0	0	0	0	Finished	0.0s	81,071	-
2	baseball dimension lookup/update	0	1134	1134	162	1134	0	0	0	Finished	3.2s	350	-

Execution Results

Logging Execution History Step Metrics Performance Graph Metrics Preview data																					
First rows Last rows Off																					
#	Game_id	Day_of_Week	Date	Live	Tm	Against	Opp	W/L	R	RA	Inn	W-L	Rank	GB	Win	Loss	Save	Time	D/N	Attendance	Streak
1	1	Thursday	05/05/2012	boxscore	BOS	@ DET	L-wo	2	3	<null>	0-1		5	1	Valverde	Melancon	<null>	3:07	D	45027	-
2	2	Saturday	05/07/2012	boxscore	BOS	@ DET	L	0	10	<null>	0-2		4	2	Below	Beckett	<null>	2:53	D	44710	-
3	3	Sunday	05/08/2012	boxscore	BOS	@ DET	L-wo	12	13		11 0-3		4	3	Below	Melancon	<null>	4:45	D	30788	---
4	4	Monday	05/09/2012	boxscore	BOS	@ TOR	W	4	2	<null>	3-Jan		4	2.5	Atchison	Santos	Aceves	3:02	N	48473	+
5	5	Tuesday	05/10/2012	boxscore	BOS	@ TOR	L	3	7	<null>	4-Jan		5	2.5	Drabek	Bard	<null>	3:19	N	26351	-
6	6	Wednesday	05/11/2012	boxscore	BOS	@ TOR	L	1	3	<null>	5-Jan		5	3.5	Romero	Lester	Santos	2:13	D	25285	-
7	7	Friday	05/13/2012	boxscore	BOS	<null> TBR	W	12	2	<null>	5-Feb		5	2	Beckett	Price	<null>	3:19	D	37032	+
8	8	Saturday	05/14/2012	boxscore	BOS	<null> TBR	W	13	5	<null>	5-Mar		5	2	Buchholz	Badenhop	<null>	3:18	D	38024	++
9	9	Sunday	05/15/2012	boxscore	BOS	<null> TBR	W	6	4	<null>	5-Apr		4	1	Padilla	Moore	Aceves	3:12	D	38024	+++
10	10	Monday	05/16/2012	boxscore	BOS	<null> TBR	L	0	1	<null>	6-Apr		5	2	Shields	Bard	Rodney	3:08	D	38108	-
11	11	Tuesday	05/17/2012	boxscore	BOS	<null> TEX	L	3	18	<null>	7-Apr		5	3	Lewis	Lester	<null>	3:25	N	38229	---
12	12	Wednesday	05/18/2012	boxscore	BOS	<null> TEX	L	3	6	<null>	8-Apr		5	3	Holland	Beckett	<null>	3:03	N	37967	---
13	13	Friday	05/20/2012	boxscore	BOS	<null> NYY	L	2	6	<null>	9-Apr		5	3.5	Nova	Buchholz	<null>	3:18	D	36770	----
14	14	Saturday	05/21/2012	boxscore	BOS	<null> NYY	L	9	15	<null>	10-Apr		5	4.5	Soniano	Aceves	<null>	3:52	D	37839	-----
15	15	Monday	05/23/2012	boxscore	BOS	@ MIN	W	6	5	<null>	10-May		5	4.5	Bard	Capps	Aceves	3:12	N	32351	+
16	16	Tuesday	05/24/2012	boxscore	BOS	@ MIN	W	11	2	<null>	10-Jun		5	3.5	Beckett	Blackburn	<null>	3:03	N	33651	++
17	17	Wednesday	05/25/2012	boxscore	BOS	@ MIN	W	7	6	<null>	10-Jul		5	3.5	Buchholz	Hendricks	Aceves	3:32	N	38229	+++
18	18	Thursday	05/26/2012	boxscore	BOS	@ CHW	W	10	3	<null>	10-Aug		5	3.5	Doubont	Humber	Tazawa	3:03	N	20266	++++
19	19	Friday	05/27/2012	boxscore	BOS	@ CHW	W	10	3	<null>	10-Sep		5	3.5	Bard	Danks	<null>	2:47	N	20414	+++++
20	20	Saturday	05/28/2012	boxscore	BOS	@ CHW	W	1	0	<null>	10-Oct		5	2.5	Lester	Peavy	Aceves	2:44	N	20057	+++++
21	21	Sunday	05/29/2012	boxscore	BOS	@ CHW	L	1	4	<null>	11-Oct		5	3.5	Floyd	Beckett	Thornton	2:58	D	22811	+
22	22	Monday	05/30/2012	boxscore	BOS	<null> OAK	W	11	6	<null>	11-Nov		5	3.5	Buchholz	Milone	<null>	3:23	N	37359	+
23	23	Tuesday	05/01/2012	boxscore	BOS	<null> OAK	L	3	5	<null>	12-Nov		5	4.5	Parker	Doubont	Norberto	3:31	N	37225	-
24	24	Wednesday	05/02/2012	boxscore	BOS	<null> OAK	L	2	4	<null>	13-Nov		5	5.5	McCarthy	Bard	Fuentes	3:22	N	37434	--
25	25	Friday	05/04/2012	boxscore	BOS	<null> BAL	L	4	6	<null>	14-Nov		5	7	Patton	Morales	Johnson	4:37	N	37223	---
26	26	Saturday	05/05/2012	boxscore	BOS	<null> BAL	L	2	8	<null>	15-Nov		5	7	Hammel	Cook	<null>	2:56	D	37581	----
27	27	Sunday	05/06/2012	boxscore	BOS	<null> BAL	L	6	9	<null>	16-Nov		5	7.5	Davis	McDonald	<null>	6:07	D	37394	-----
28	28	Monday	05/07/2012	boxscore	BOS	@ KCR	W	11	5	<null>	16-Dec		5	6.5	Doubont	Sanchez	Padilla	3:11	N	19502	+
29	29	Tuesday	05/08/2012	boxscore	BOS	@ KCR	L	4	6	<null>	17-Dec		5	6.5	Mjares	Bard	Broxton	2:52	N	20524	-
30	30	Wednesday	05/09/2012	boxscore	BOS	@ KCR	L	3	4	<null>	18-Dec		5	7.5	Chen	Lester	Broxton	2:55	N	18339	--
31	31	Thursday	05/10/2012	boxscore	BOS	<null> CLE	L	3	8	<null>	19-Dec		5	7.5	Lowe	Beckett	<null>	3:11	N	37348	---
32	32	Friday	05/11/2012	boxscore	BOS	<null> CLE	W	7	5	<null>	13-19		5	7.5	Buchholz	Jimenez	Aceves	3:57	N	37438	---
33	33	Saturday	05/12/2012	boxscore	BOS	<null> CLE	W	4	1	<null>	14-19		5	7.5	Doubont	McAllister	Aceves	2:30	N	38048	++

Streetlights:

Logging

Execution History

Step Metrics

Performance Graph

Metrics

Preview data

#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	streetlights CSV file input	0	0	74065	74066	0	0	0	0	Finished	24.0s	3,080	-
2	Streetlights dimension lookup/update	0	74065	74065	74065	74065	0	0	0	Finished	27.8s	2,662	-

Logging Execution History Step Metrics Performance Graph Metrics Preview data

☒ First rows ☐ Last rows ☐ Off

#	the_geom	OBJECTID	TYPE	Lat	Long	streetlights_dim_id
1	POINT (-71.0760443807948 42.35315925057316)	1	LIGHT	42.35315925	-71.07604438	1
2	POINT (-71.07538171240694 42.353347768071195)	2	LIGHT	42.35334777	-71.07538171	2
3	POINT (-71.07477488057383 42.35352052068278)	3	LIGHT	42.35352052	-71.07477488	3
4	POINT (-71.07440373484715 42.3535558201314)	4	LIGHT	42.35355582	-71.07440373	4
5	POINT (-71.07362079549182 42.35381056415504)	5	LIGHT	42.35381056	-71.0736208	5
6	POINT (-71.07325501418602 42.3539109113942)	6	LIGHT	42.35391091	-71.07325501	6
7	POINT (-71.07292162030087 42.354000153832814)	7	LIGHT	42.35400015	-71.07292162	7
8	POINT (-71.0724038233387 42.35414092034717)	8	LIGHT	42.35414092	-71.07240382	8
9	POINT (-71.07866370176541 42.35492688534045)	9	LIGHT	42.35492689	-71.0786637	9
10	POINT (-71.07921632936232 42.35482231438127)	10	LIGHT	42.35482231	-71.07921633	10
11	POINT (-71.07788136735387 42.354936210772486)	11	LIGHT	42.35493621	-71.07788137	11
12	POINT (-71.07830036903032 42.35482384868488)	12	LIGHT	42.35482385	-71.07830037	12
13	POINT (-71.0787153620535 42.3547115433116)	13	LIGHT	42.35471154	-71.07871536	13

Creating the schools Fact Table:



Execution Results													
Logging Execution History Step Metrics Performance Graph Metrics Preview data													
#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	schools input	0	0	131	132	0	0	0	0	Finished	0.0s	18,857	-
2	Dimension lookup/update	0	131	131	131	72	0	0	0	Finished	0.1s	1,364	-
3	nonpublic schools lookup	0	131	131	131	131	0	0	0	Finished	0.2s	577	-
4	public_schools lookup	0	131	131	131	131	0	0	0	Finished	0.3s	468	-
5	load schools fact table	0	131	131	0	131	0	0	0	Finished	0.3s	432	-

Execution Results													
Logging Execution History Step Metrics Performance Graph Metrics Preview data													
<input checked="" type="radio"/> First rows <input type="radio"/> Last rows <input type="radio"/> Off													
#	Id	OBJECTID	OBJECTIDPub	COLLEGES_DIM_ID	NON_PUBLIC_SCHOOLS_DIM_OBJECTID	public_schools_dim_OBJECTID							
1	98627	163	1	1	1	1							
2	11959	153	2	2	2	2							
3	16632	1100	3	3	3	3							
4	1949	206	4	4	4	4							
5	9109	134	5	5	5	5							
6	86640	136	6	6	6	6							
7	86302	137	7	7	7	7							
8	86125	138	8	8	8	8							
9	15422	143	9	9	9	9							
10	22285	149	10	10	10	10							
11	86683	151	11	11	11	11							
12	89176	157	12	12	12	12							
13	91520	159	13	13	13	13							
14	15399	166	14	14	14	14							
15	15400	1521	15	15	15	15							
16	15282	186	16	16	16	16							
17	16275	1128	17	17	17	17							
18	16291	178	18	18	18	18							
19	16267	179	19	19	19	19							
20	84599	180	20	20	20	20							
21	17534	182	21	21	21	21							
22	17638	183	22	22	22	22							
23	14097	1523	23	23	23	23							
24	86676	1524	24	24	24	24							
25	98086	1525	25	25	25	25							
26	11753	169	27	26	26	26							
27	86735	1768	28	27	27	27							
28	79838	1770	29	28	28	28							
29	79841	1771	30	29	29	29							
30	12255	175	32	30	30	30							
31	9019	174	34	31	31	31							
32	12435	181	35	32	32	32							
33	11884	185	36	33	33	33							
34	14049	167	37	34	34	34							

Creating fact table:



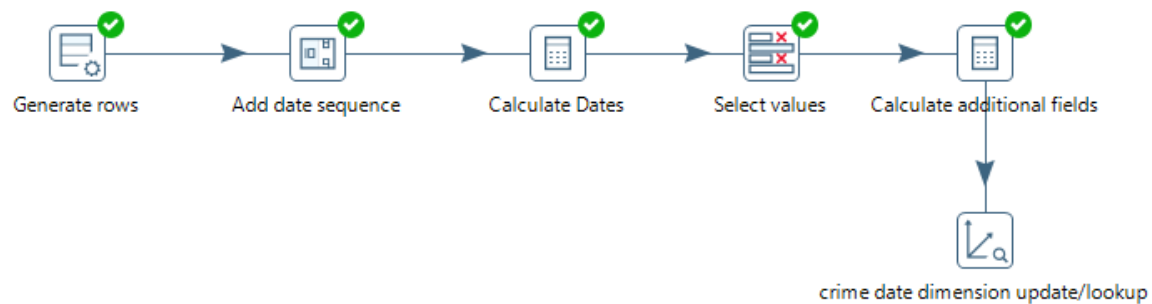
Execution Results

Logging Execution History Step Metrics Performance Graph Metrics Preview data

#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	fact_2_input	0	0	575226	575227	0	0	0	0	Finished	1mn 50s	5,200	-
2	boston weather dim lookup	0	575226	575226	575226	0	0	0	0	Finished	1mn 52s	5,111	-
3	crimes dimension lookup	0	575226	575226	575226	0	0	0	0	Finished	1mn 52s	5,107	-
4	baseball dimension lookup	0	575226	575226	575226	0	0	0	0	Finished	1mn 52s	5,107	-
5	streetlights dimension lookup	0	575226	575226	575226	0	0	0	0	Finished	1mn 52s	5,104	-
6	dates dimension lookup	0	575226	575226	575226	0	0	0	0	Finished	1mn 52s	5,103	-
7	main data fact table	0	575226	575226	0	575226	0	0	0	Finished	1mn 52s	5,096	-

#	date	Count	Game_id	OBJECTID	BOSTONWEATHER_DIM_COUNT	CRIMESINCIDENT_DIM_ID	BASEBALL_DIM_GAME_ID	STREETLIGHTS_DIM_ID	CRIME_DATE_DIM
1	01/01/2012	1	1	1	1	1	2107	1	0
2	01/02/2012	2	2	2	2	2	2108	2	1
3	01/03/2012	3	3	3	3	3	2109	3	2
4	01/04/2012	4	4	4	4	4	2110	4	3
5	01/05/2012	5	5	5	5	5	2111	5	4
6	01/06/2012	6	6	6	6	6	2112	6	5
7	01/07/2012	7	7	7	7	7	2113	7	6
8	01/08/2012	8	8	8	8	8	2114	8	7
9	01/09/2012	9	9	9	9	9	2115	9	8
10	01/10/2012	10	10	10	10	10	2116	10	9
11	01/11/2012	11	11	11	11	11	2117	11	10
12	01/12/2012	12	12	12	12	12	2118	12	11
13	01/13/2012	13	13	13	13	13	2119	13	12
14	01/14/2012	14	14	14	14	14	2120	14	13
15	01/15/2012	15	15	15	15	15	2121	15	14
16	01/16/2012	16	16	16	16	16	2122	16	15
17	01/17/2012	17	17	17	17	17	2123	17	16
18	01/18/2012	18	18	18	18	18	2124	18	17
19	01/19/2012	19	19	19	19	19	2125	19	18
20	01/20/2012	20	20	20	20	20	2126	20	19
21	01/21/2012	21	21	21	21	21	2127	21	20
22	01/22/2012	22	22	22	22	22	2128	22	21
23	01/23/2012	23	23	23	23	23	2129	23	22
24	01/24/2012	24	24	24	24	24	2130	24	23
25	01/25/2012	25	25	25	25	25	2131	25	24
26	01/26/2012	26	26	26	26	26	2132	26	25
27	01/27/2012	27	27	27	27	27	2133	27	26
28	01/28/2012	28	28	28	28	28	2134	28	27
29	01/29/2012	29	29	29	29	29	2135	29	28
30	01/30/2012	30	30	30	30	30	2136	30	29
31	01/31/2012	31	31	31	31	31	2137	31	30
32	02/01/2012	32	32	32	32	32	2138	32	31
33	02/02/2012	33	33	33	33	33	2139	33	32
34	02/03/2012	34	34	34	34	34	2140	34	33
35	02/04/2012	35	35	35	35	35	2141	35	34
36	02/05/2012	36	36	36	36	36	2142	36	35
37	02/06/2012	37	37	37	37	37	2143	37	36

Creating Date Dimension:

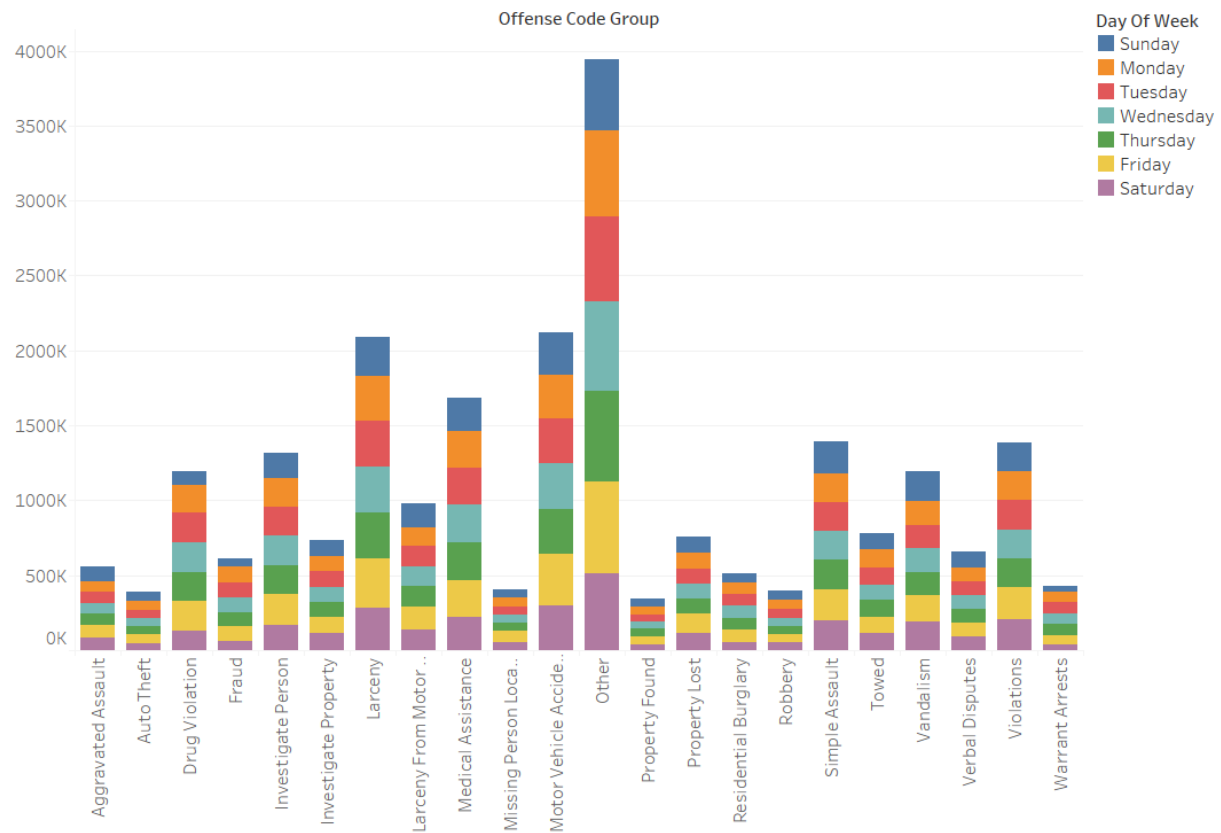


Logging Execution History Step Metrics Performance Graph Metrics Preview data													
#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/output
1	Generate rows	0	0	2500	0	0	0	0	0	Finished	0.0s	1,250,000	-
2	Add date sequence	0	2500	2500	0	0	0	0	0	Finished	0.0s	312,500	-
3	Calculate Dates	0	2500	2500	0	0	0	0	0	Finished	0.0s	208,333	-
4	Select values	0	2500	2500	0	0	0	0	0	Finished	0.0s	131,579	-
5	Calculate additional fields	0	2500	2500	0	0	0	0	0	Finished	0.1s	40,322	-
6	crime dimension update	0	2500	2500	2500	0	0	0	0	Finished	0.6s	3,981	-

Logging Execution History Step Metrics Performance Graph Metrics Preview data									
First rows Last rows Off									
#	crime_date	crime_day_of_year	crime_month	crime_year	crime_month_name	crime_week	crime_day_of_week_name	crime_day_of_month	crime_date_dim
1	01/02/2012	2	1	2012	January	1	Monday	2	1
2	01/03/2012	3	1	2012	January	1	Tuesday	3	2
3	01/04/2012	4	1	2012	January	1	Wednesday	4	3
4	01/05/2012	5	1	2012	January	1	Thursday	5	4
5	01/06/2012	6	1	2012	January	1	Friday	6	5
6	01/07/2012	7	1	2012	January	1	Saturday	7	6
7	01/08/2012	8	1	2012	January	2	Sunday	8	7
8	01/09/2012	9	1	2012	January	2	Monday	9	8
9	01/10/2012	10	1	2012	January	2	Tuesday	10	9
10	01/11/2012	11	1	2012	January	2	Wednesday	11	10
11	01/12/2012	12	1	2012	January	2	Thursday	12	11
12	01/13/2012	13	1	2012	January	2	Friday	13	12
13	01/14/2012	14	1	2012	January	2	Saturday	14	13
14	01/15/2012	15	1	2012	January	3	Sunday	15	14
15	01/16/2012	16	1	2012	January	3	Monday	16	15
16	01/17/2012	17	1	2012	January	3	Tuesday	17	16
17	01/18/2012	18	1	2012	January	3	Wednesday	18	17
18	01/19/2012	19	1	2012	January	3	Thursday	19	18
19	01/20/2012	20	1	2012	January	3	Friday	20	19
20	01/21/2012	21	1	2012	January	3	Saturday	21	20
21	01/22/2012	22	1	2012	January	4	Sunday	22	21
22	01/23/2012	23	1	2012	January	4	Monday	23	22
23	01/24/2012	24	1	2012	January	4	Tuesday	24	23
24	01/25/2012	25	1	2012	January	4	Wednesday	25	24
25	01/26/2012	26	1	2012	January	4	Thursday	26	25
26	01/27/2012	27	1	2012	January	4	Friday	27	26
27	01/28/2012	28	1	2012	January	4	Saturday	28	27
28	01/29/2012	29	1	2012	January	5	Sunday	29	28
29	01/30/2012	30	1	2012	January	5	Monday	30	29
30	01/31/2012	31	1	2012	January	5	Tuesday	31	30
31	02/01/2012	32	2	2012	February	5	Wednesday	1	31

DASHBOARD:

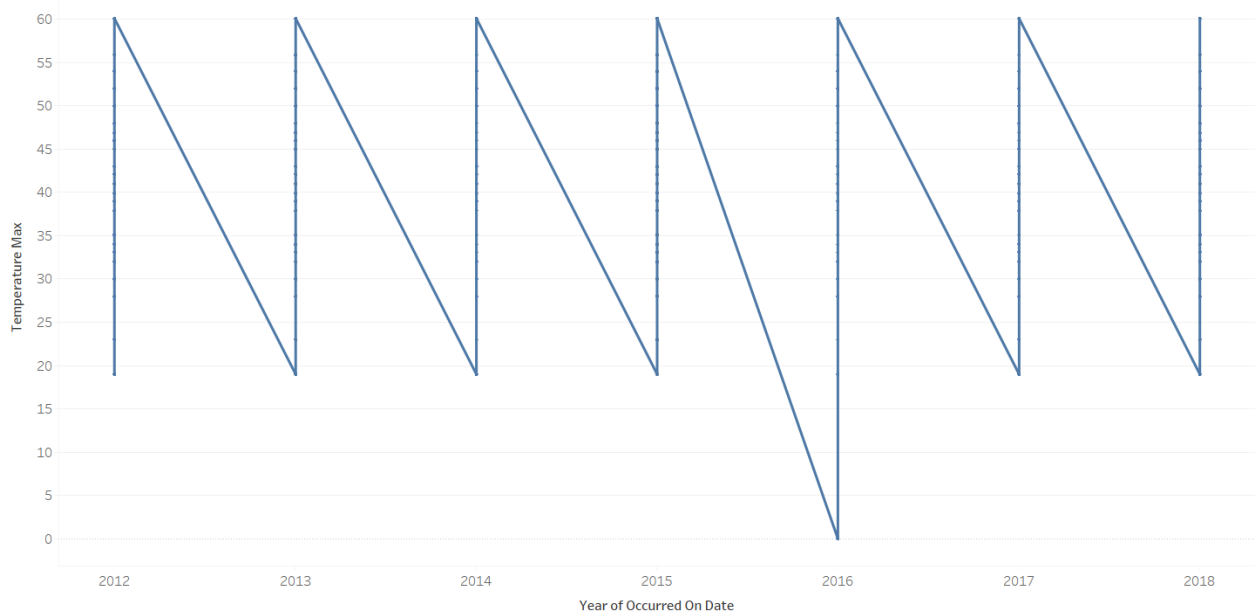
Crime occurred with high temperatures and day of week



Temperature Max for each Offense Code Group. Color shows details about Day Of Week.

This graph represents temperatures effect on crime for the days of week.

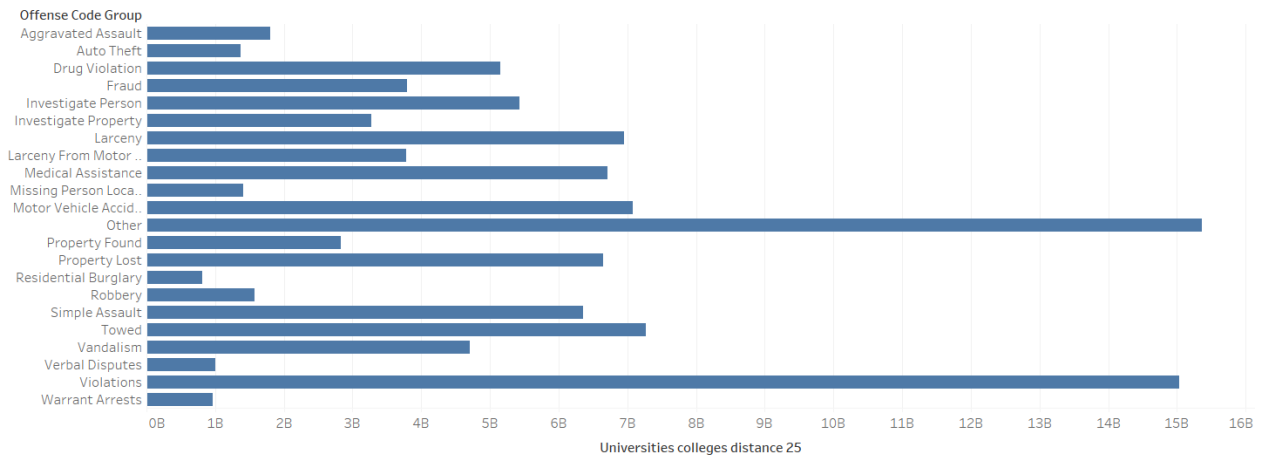
Temperature effect on Crime



The trend of Temperature Max for Year of Occurred On Date.

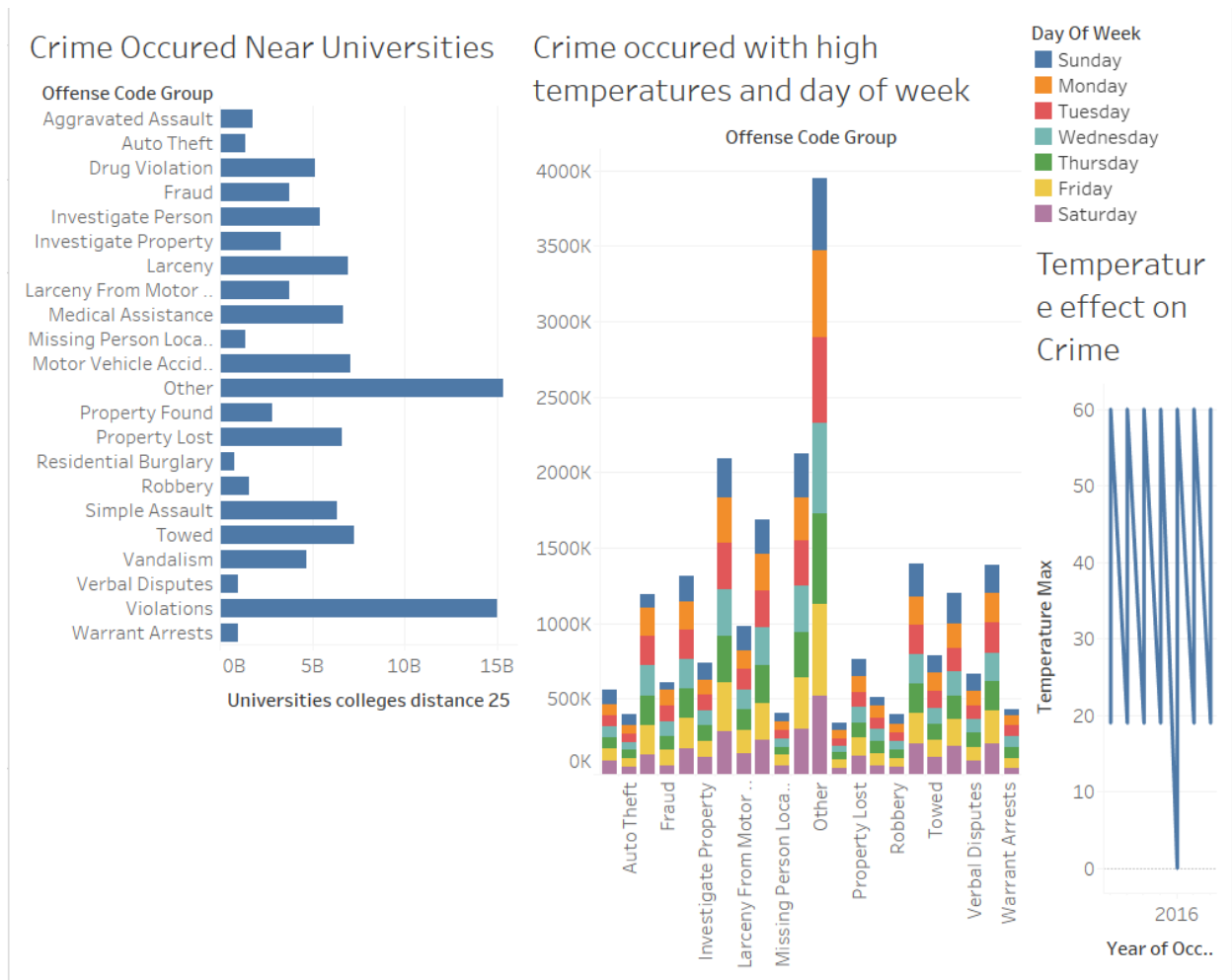
This graph demonstrates that higher temperature led to more crimes each year.

Crime Occured Near Universities



Sum of Universities colleges distance 25 for each Offense Code Group.

This graph demonstrates that violations occurred most near universities considering college students may have influenced this data.



Dashboard created for crime incidents

Narrative Conclusion:

The experience that we had with this project was that we were all busy and could not efficiently find time to meet often enough to have enough productivity on the project assigned. Time management for this process was most difficult and deciding which datasets to use for the project. The easiest part was to load the data and run it through the programs once we had an idea of what to do. The thing that we learned was that there were a lot of steps to take for data before we can implement it for dashboarding or any other form of insights. If we had to do it all over again probably would start the project a lot earlier to make it less stressful. The proposed benefits give some insight as to how crime is affected by certain factors.

Datasets Used:

https://www.kaggle.com/zer0state/crime-incident-reports-august-2015-to-date?fbclid=IwAR0SQUb-iB2trQAZJCEMmA1de5wRU8LOvIF27cziYjYcpvpFxn_ylFAH1Hk

https://www.kaggle.com/kosovanolexandr/boston-offenses-and-other-open-data?fbclid=IwAR0DALtKujlGwKPblYiqiv75_N4bjL6dXxNzevavqAnZqsxJDw3dOXCnvZw#Colleges_and_Universities.csv

https://www.kaggle.com/kosovanolexandr/boston-offenses-and-other-open-data?fbclid=IwAR0DALtKujlGwKPblYiqiv75_N4bjL6dXxNzevavqAnZqsxJDw3dOXCnvZw#crime-incident-reports-2015-to-date.csv

https://www.kaggle.com/kosovanolexandr/boston-offenses-and-other-open-data?fbclid=IwAR0DALtKujlGwKPblYiqiv75_N4bjL6dXxNzevavqAnZqsxJDw3dOXCnvZw#Non_Public_Schools.csv

https://www.kaggle.com/kosovanolexandr/boston-offenses-and-other-open-data?fbclid=IwAR0DALtKujlGwKPblYiqiv75_N4bjL6dXxNzevavqAnZqsxJDw3dOXCnvZw#Public_Schools.csv

https://www.kaggle.com/kosovanolexandr/boston-offenses-and-other-open-data?fbclid=IwAR0DALtKujlGwKPblYiqiv75_N4bjL6dXxNzevavqAnZqsxJDw3dOXCnvZw#streetlight-locations.csv

https://www.kaggle.com/kosovanolexandr/boston-offenses-and-other-open-data?fbclid=IwAR0DALtKujlGwKPblYiqiv75_N4bjL6dXxNzevavqAnZqsxJDw3dOXCnvZw#boston-weather-2012-2018.csv

https://www.kaggle.com/kosovanolexandr/boston-offenses-and-other-open-data?fbclid=IwAR0DALtKujlGwKPblYiqiv75_N4bjL6dXxNzevavqAnZqsxJDw3dOXCnvZw#streetlight-locations.csv

<https://www.baseball-reference.com/teams/BOS/2019-schedule-scores.shtml?fbclid=IwAR1Xc55bugnag0aao-mVw9YmlCJVxWHjeIYf0pM5bEExidmKnuOLFg9Drdc>