

2D spatial map assignment

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Concept

What is the trend of the quantity of checked out books whose topic is about these four popular--sports, football, basketball, baseball and ice hockey?

By execute the SQL sentence, we can get the total number of books checked out from 2006-2013 and group them by month and year so that we can see the overall trend of the popularity of these four sports in Seattle.

Query

```
select month(cout) as 'Month', year(cout) as 'Year',  
       sum(case when(`subject`.`subject` like '%basketball%') then 1 else 0 end) as  
'Basketball',  
       sum(case when(`subject`.`subject` like '%baseball%') then 1 else 0 end) as  
'Baseball',  
       sum(case when(`subject`.`subject` like '%football%') then 1 else 0 end) as  
'Football',  
       sum(case when(`subject`.`subject` like '%hockey%') then 1 else 0 end) as 'Ice  
Hockey'  
from inraw, `subject` where inraw.`bibNumber`=`subject`.`bib`  
group by year(cout), month(cout)  
order by year(cout), month(cout) asc;
```

Data

Month	Year	Basketball	Baseball	Football	Ice Hockey
1	2006	1261	2255	997	159
2	2006	1228	2324	935	141
3	2006	1512	2969	1183	166
4	2006	962	2499	847	106
5	2006	1387	2902	1079	132
6	2006	1933	3307	1374	173
7	2006	2372	3539	1289	175
8	2006	2142	3349	1412	169
9	2006	2080	3130	1368	145
10	2006	2169	2958	1466	132
11	2006	1817	2744	1301	142
12	2006	1370	1809	1064	113
1	2007	836	1319	772	72
2	2007	1419	2527	1569	91
3	2007	2235	3071	1999	175
4	2007	1987	3265	1739	135
5	2007	1703	3001	1313	123
6	2007	2300	3596	1842	132
7	2007	2139	4057	1534	131
8	2007	2291	3756	1700	151
9	2007	1818	2866	1707	133
10	2007	1430	2627	1871	153
11	2007	2157	2870	2577	157
12	2007	1599	2550	2405	180
1	2008	1887	2586	3342	272
2	2008	1728	2433	3059	289
3	2008	1658	2944	2729	245

4	2008	1733	3322	2762	229
5	2008	1701	3953	2462	230
6	2008	1824	3644	2676	302
7	2008	1640	3694	2696	276
8	2008	1937	3336	2596	289
9	2008	1654	2827	2632	234
10	2008	1709	2721	3058	267
11	2008	1568	2315	2769	314
12	2008	1452	2072	2852	288
1	2009	1740	2956	3253	337
2	2009	1702	2874	3425	282
3	2009	1771	3521	3184	280
4	2009	1833	3576	2843	206
5	2009	1683	3498	2780	272
6	2009	1940	3996	2992	351
7	2009	1918	4064	3096	315
8	2009	1770	3490	2985	312
9	2009	1027	2259	2323	166
10	2009	1444	3580	3311	260
11	2009	1426	3092	2950	247
12	2009	1698	2646	3096	241
1	2010	1759	3164	3183	306
2	2010	2290	2920	2743	277
3	2010	2126	3920	3456	286
4	2010	1739	3828	4214	242
5	2010	1615	3684	4029	293
6	2010	1814	3758	4776	312

7	2010	1575	3602	4308	268
8	2010	1668	3417	4299	233
9	2010	1115	2462	3425	180
10	2010	1519	2668	4186	232
11	2010	1794	2533	3596	198
12	2010	1997	2374	3682	214
1	2011	2039	2619	3757	243
2	2011	2025	2485	3249	188
3	2011	2201	3088	3730	250
4	2011	2051	3414	3217	193
5	2011	1744	3203	3029	206
6	2011	1779	3522	2993	213
7	2011	1689	3126	2603	194
8	2011	1074	2120	2316	154
9	2011	779	1520	1615	132
10	2011	1004	1922	1984	145
11	2011	1009	1742	2097	151
12	2011	960	1499	2031	102
1	2012	952	2056	2061	110
2	2012	1011	2547	1985	158
3	2012	1044	2987	2037	129
4	2012	957	2999	1780	131
5	2012	879	3096	1623	151
6	2012	999	3741	1899	142
7	2012	1215	3711	1948	211
8	2012	874	2769	1506	183
9	2012	732	2443	1435	179

10	2012	829	3116	1828	211
11	2012	747	2837	1748	259
12	2012	718	2673	1601	263
1	2013	862	3096	2023	303
2	2013	824	2717	1773	266
3	2013	928	3036	1709	250
4	2013	897	3526	1523	207
5	2013	867	2753	1351	201
6	2013	1019	3214	1454	194
7	2013	1058	3634	1491	211
8	2013	862	3409	1387	170
9	2013	717	3022	1402	145
10	2013	774	3029	1667	126
11	2013	848	2872	1470	185
12	2013	570	1497	993	113

Doodle

