



## MerkleSokrati assignment2

### SKUs analyses

**Question 1:** What is the monthly & quaterly sales data by SKU?

Monthly data:

SKU	2527	3042	3086	3155	3166	8272	9311	13159	13160	14011	...	PPAM05126	PPAM05156	PPAM06156	PPAM07156	PPAM08156	PPAM111
2019-08	41702	69451	27412	46443	10720	31559	19045	1822	1485	186	...	822	925	478	2395	3151	
2019-09	36880	62415	31687	41922	10306	35877	17797	1990	1753	180	...	814	1211	580	2266	3021	
2019-10	30582	71082	33122	45421	11966	35109	14797	1857	2045	186	...	971	1725	621	2490	3451	
2019-11	21916	83246	28937	55371	13094	35407	11495	1853	1445	180	...	1180	1649	573	2769	3412	
2019-12	23804	87899	33444	72253	13848	22536	9002	2051	1272	186	...	1168	1630	541	3346	2812	
2020-01	21853	79546	35670	75218	13990	16265	8532	2297	1248	186	...	1461	1339	388	3281	3499	
2020-02	23170	78095	32029	61235	10517	14922	7193	2001	1154	174	...	1136	1374	353	2601	4040	
2020-03	30956	92606	30827	72241	9587	18244	8971	1967	949	186	...	887	1928	330	3107	5874	
2020-04	38202	120947	25062	67543	12110	24042	9115	1800	845	180	...	538	1623	325	2990	7265	
2020-05	44347	135342	22231	57518	9838	33069	10741	1447	1062	186	...	358	1332	409	3837	8075	
2020-06	49341	157482	24184	53480	9076	22895	8341	1087	1261	180	...	307	943	363	3708	6403	
2020-07	55826	196062	26153	54253	10182	20594	6834	1150	1168	186	...	317	975	326	2566	5023	

Quaterly data:

SKU	2527	3042	3086	3155	3166	8272	9311	13159	13160	14011	...	PPAM05126	PPAM05156	PPAM06156	PPAM07156	PPAM08156	PPAM111
2019-08	41702	69451	27412	46443	10720	31559	19045	1822	1485	186	...	822	925	478	2395	3151	
2019-11	89378	216743	93746	142714	35366	106393	44089	5700	5243	546	...	2965	4585	1774	7525	9884	
2020-02	68827	245540	101143	208706	38355	53723	24727	6349	3674	546	...	3765	4343	1282	9228	10351	
2020-05	113505	348895	78120	197302	31535	75355	28827	5214	2856	552	...	1783	4883	1064	9934	21214	
2020-08	105167	353544	50337	107733	19258	43489	15175	2237	2429	366	...	624	1918	689	6274	11426	

**Question 2:** Which are the top 3 months in terms of overall sales?

**Best 3 months on overall sales are:**

- december 2019 with 19536270
- january 2020 with 19170099
- march 2020 with 20234570

**Question 3:** Which SKUs are outliers in terms sales in any month?

It seems there aren't SKU outliers on a monthly basis.

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