

Data Visualization

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B21AI017

Installation:

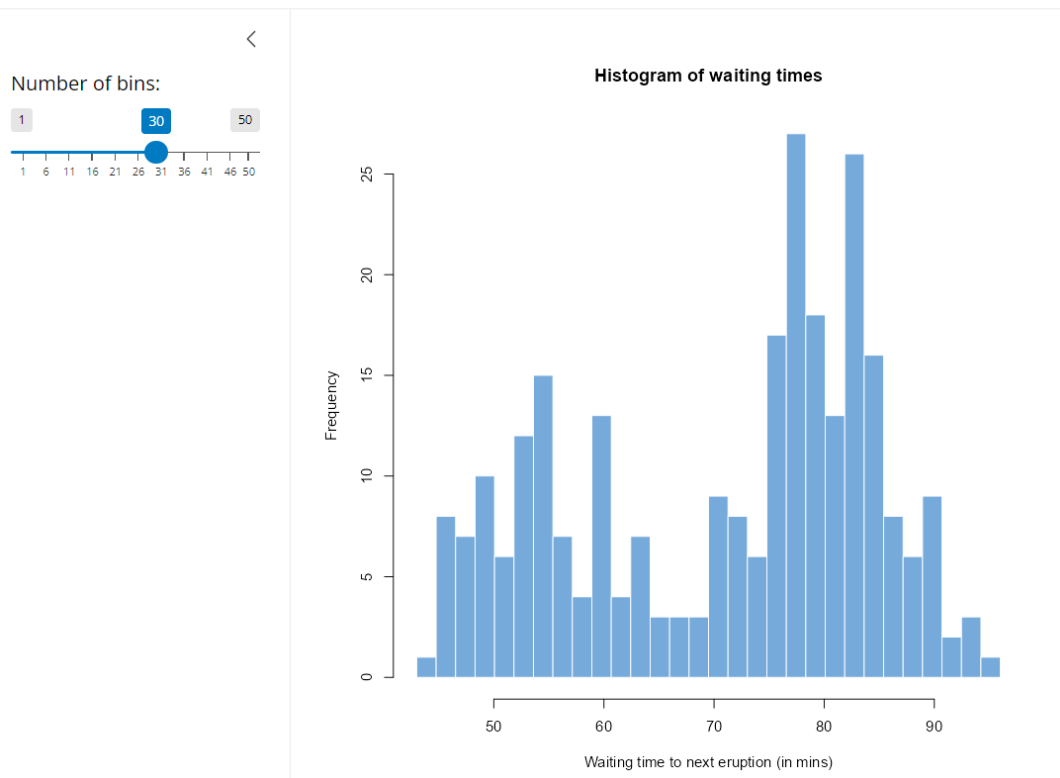
As per the instructions, I installed Rstudio and R-4.3.3.

We'll be considering 3 datasets, DatasetTags, KernelTags and TeamMemberships.

Following the steps in the Shiny tutorial, we plotted the following example plots–

1. `runExample("01_hello")`

Hello Shiny!



2. `runExample("02_text")`

Shiny Text

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Choose a dataset:

rock ▼

Number of observations to view:

10

area	peri	shape	perm
Min. : 1016	Min. : 308.6	Min. : 0.09033	Min. : 6.30
1st Qu.: 5305	1st Qu.: 1414.9	1st Qu.: 0.16226	1st Qu.: 76.45
Median : 7487	Median : 2536.2	Median : 0.19886	Median : 130.50
Mean : 7188	Mean : 2682.2	Mean : 0.21811	Mean : 415.45
3rd Qu.: 8870	3rd Qu.: 3989.5	3rd Qu.: 0.26267	3rd Qu.: 777.50
Max. : 12212	Max. : 4864.2	Max. : 0.46413	Max. : 1300.00

area	peri	shape	perm
4990	2791.90	0.09	6.30
7002	3892.60	0.15	6.30
7558	3930.66	0.18	6.30
7352	3869.32	0.12	6.30
7943	3948.54	0.12	17.10
7979	4010.15	0.17	17.10
9333	4345.75	0.19	17.10
8209	4344.75	0.16	17.10
8393	3682.04	0.20	119.00
6425	3098.65	0.16	119.00

3. `runExample("03_reactivity")`

Reactivity

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Caption:

Data Summary

Choose a dataset:

rock ▼

Number of observations to view:

10

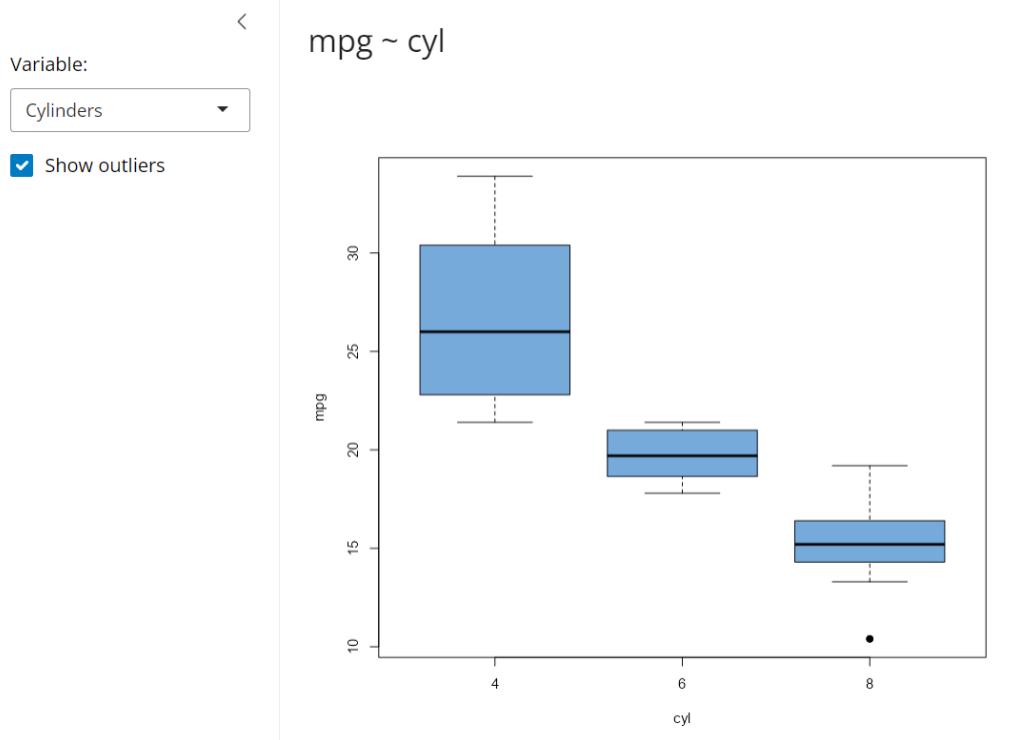
Data Summary

area	peri	shape	perm
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1st Qu.: 5305	1st Qu.: 1414.9	1st Qu.: 0.16226	1st Qu.: 76.45
Median : 7487	Median : 2536.2	Median : 0.19886	Median : 130.50
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3rd Qu.: 8870	3rd Qu.: 3989.5	3rd Qu.: 0.26267	3rd Qu.: 777.50
Max. : 12212	Max. : 4864.2	Max. : 0.46413	Max. : 1300.00

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7943	3948.54	0.12	17.10
7979	4010.15	0.17	17.10
9333	4345.75	0.19	17.10
8209	4344.75	0.16	17.10
8393	3682.04	0.20	119.00
6425	3098.65	0.16	119.00

4. `runExample("04_mpg")`

Miles Per Gallon

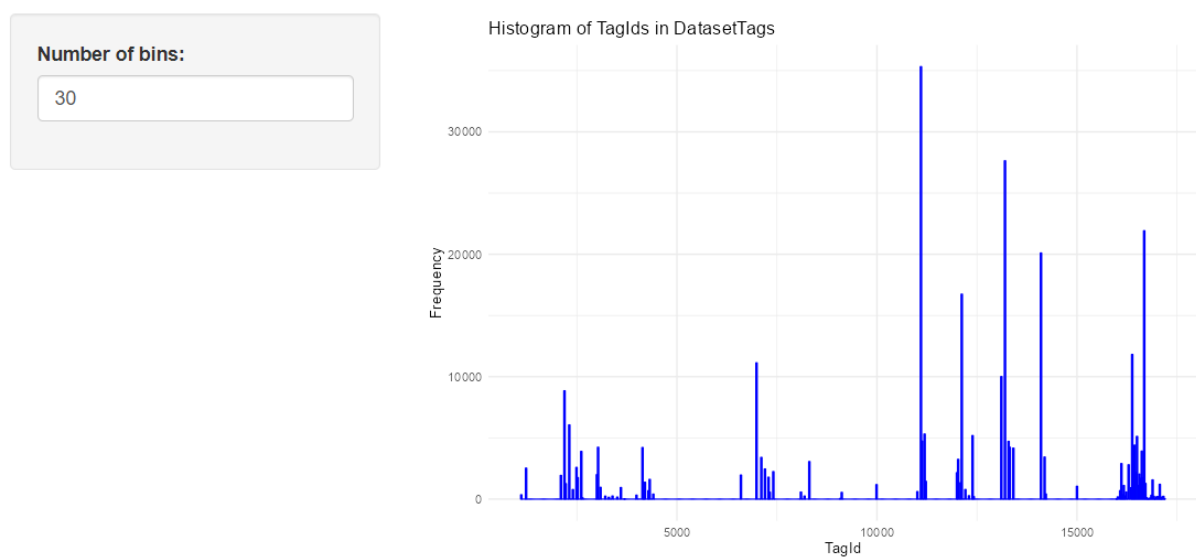


For DatasetTags Dataset:

Using DatasetTags Dataset, this dataset has four features: Id, DatasetId, TagId.

We plotted a histogram between frequency and TagId.

Histogram of TagIds in DatasetTags

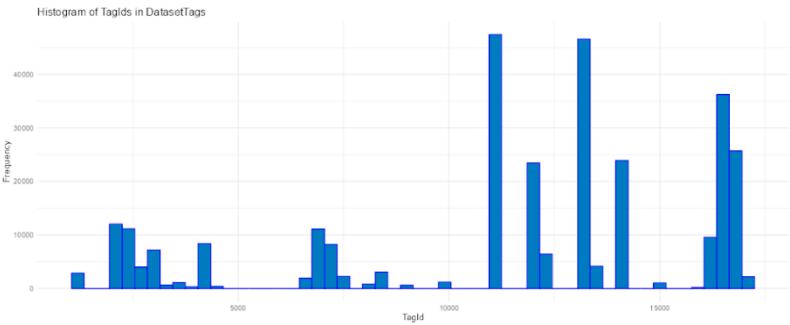


We plotted the same histogram but increased the bin size from 30 to 300.

Plots of DatasetTags

Number of bins for histogram:

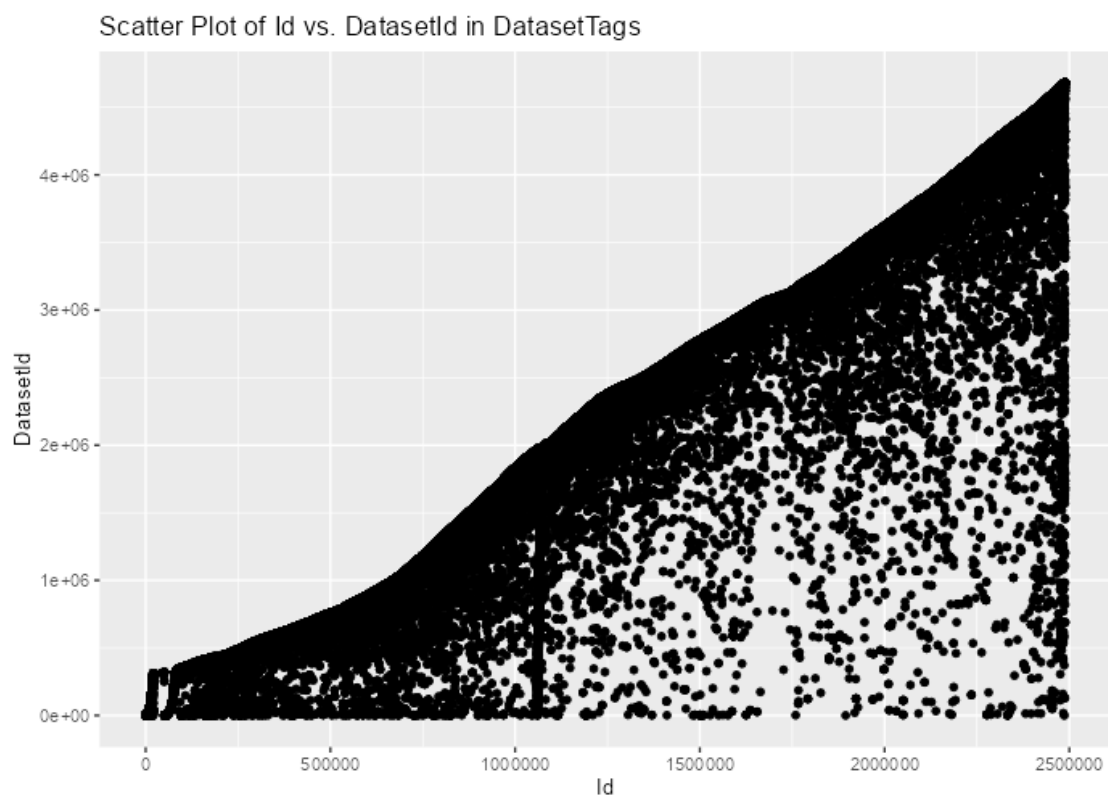
300



We plotted a bar plot for the same.

13404	14201	16175	16410	16583	16604	16625	16664	16697	16718	16756	16824	16861	16910	16951	17000	17042	17078	1
13405	14202	16177	16414	16584	16605	16626	16665	16698	16719	16761	16834	16862	16911	16953	17004	17043	17079	1
13406	14203	16189	16430	16585	16606	16627	16668	16699	16720	16762	16835	16865	16915	16961	17008	17044	17080	1
13407	14211	16206	16439	16586	16607	16628	16674	16700	16721	16764	16836	16866	16919	16964	17010	17046	17081	1
13408	14221	16215	16453	16587	16608	16629	16680	16701	16722	16767	16837	16868	16921	16965	17012	17053	17082	1
13409	15001	16221	16457	16588	16609	16630	16681	16702	16723	16769	16839	16870	16923	16966	17013	17057	17083	1
13410	15002	16229	16461	16589	16610	16631	16682	16703	16724	16771	16841	16871	16925	16970	17014	17058	17085	1
13411	15006	16278	16467	16590	16611	16632	16683	16704	16726	16774	16843	16872	16927	16972	17015	17060	17086	1
13412	16000	16281	16486	16591	16612	16633	16684	16705	16729	16778	16845	16876	16928	16979	17016	17065	17087	1
13413	16002	16302	16489	16592	16613	16634	16685	16706	16731	16780	16846	16879	16929	16980	17017	17067	17088	1
13414	16008	16340	16502	16594	16614	16635	16686	16707	16733	16782	16847	16886	16932	16981	17019	17068	17092	1
13415	16010	16369	16525	16595	16615	16636	16687	16709	16734	16783	16849	16887	16933	16982	17020	17069	17099	1
13416	16070	16371	16526	16596	16616	16637	16688	16710	16735	16784	16850	16888	16934	16987	17022	17070	17103	1
13417	16071	16373	16532	16597	16617	16638	16690	16711	16736	16790	16851	16892	16935	16988	17024	17071	17104	1
14100	16072	16378	16569	16598	16618	16639	16691	16712	16744	16796	16852	16894	16936	16992	17025	17072	17117	1
14101	16109	16382	16574	16599	16619	16640	16692	16713	16745	16804	16853	16895	16939	16993	17028	17073	17121	1
14102	16113	16383	16575	16600	16620	16641	16693	16714	16746	16805	16854	16897	16940	16994	17030	17074	17124	1
14104	16121	16388	16579	16601	16622	16642	16694	16715	16750	16810	16855	16902	16944	16995	17031	17075	17130	1
14105	16133	16403	16580	16602	16623	16643	16695	16716	16753	16812	16856	16906	16945	16996	17037	17076	17140	1
14106	16151	16409	16582	16603	16624	16663	16696	16717	16754	16816	16857	16908	16948	16999	17039	17077	17142	1

We plotted a Scatter plot between two features as Id and DatasetId.



For KernelTags Dataset:

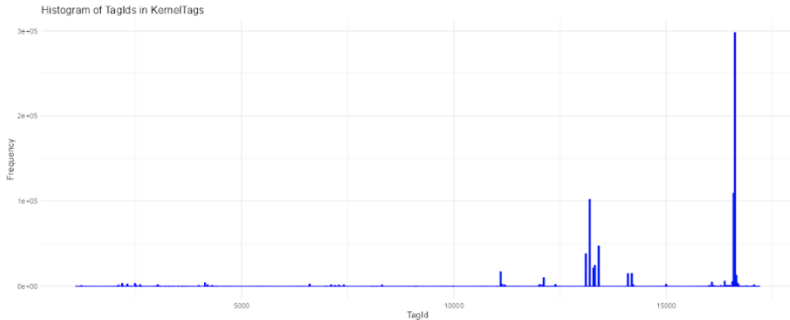
Using KernelTags Dataset, this dataset has four features: Id, KernelId, TagId.

We plotted a histogram between frequency and TagId.

Plots of KernelTags

Number of bins for histogram:

30

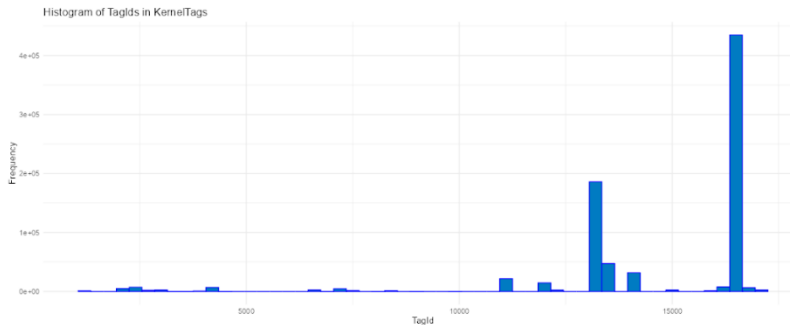


We plotted the same histogram but here, we are icing the bins size from 30 to 300.

Plots of KernelTags

Number of bins for histogram:

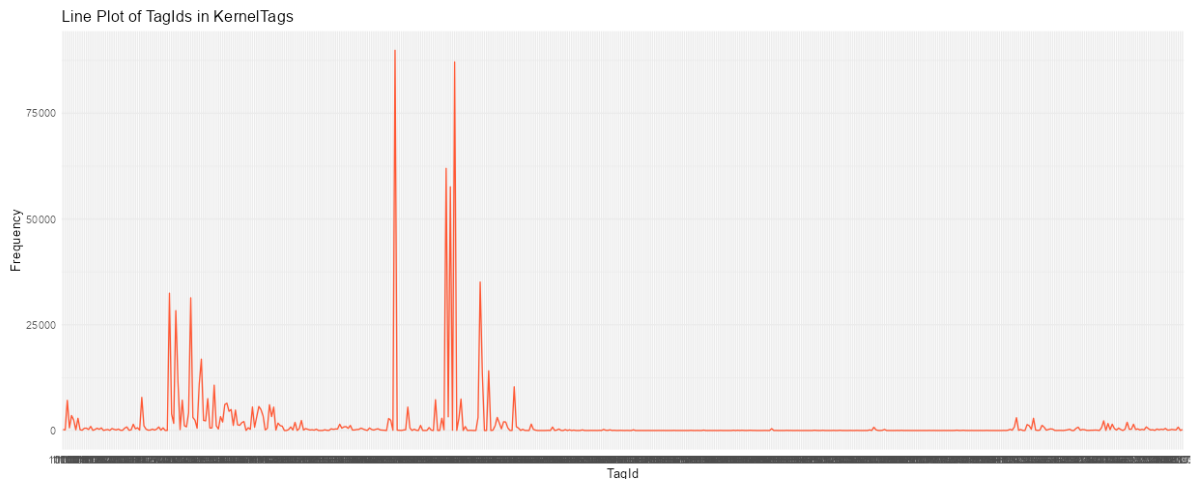
300



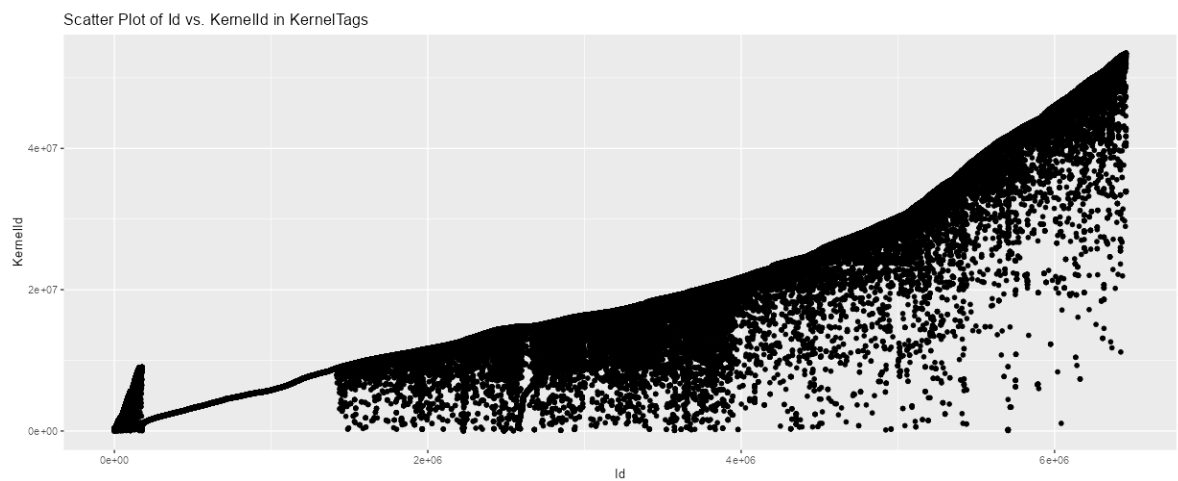
We plotted a bar plot for the same.

13208	13406	14211	16189	16430	16586	16607	16627	16667	16698	16720	16761	16794	16839	16927	17030	17075	17103	17143
13209	13407	14221	16206	16439	16587	16608	16628	16668	16699	16721	16763	16796	16841	16933	17031	17076	17104	17144
13210	13408	15001	16215	16453	16588	16609	16629	16671	16700	16722	16764	16797	16843	16934	17037	17077	17114	17145
13213	13409	15002	16221	16457	16589	16610	16630	16672	16701	16723	16765	16799	16846	16935	17042	17078	17116	17148
13215	13410	15006	16229	16461	16590	16611	16631	16680	16702	16724	16767	16801	16847	16936	17043	17080	17117	17149
13302	13411	16000	16278	16467	16591	16612	16632	16681	16703	16726	16768	16802	16854	16948	17044	17081	17118	17150
13304	13412	16002	16281	16486	16592	16613	16633	16682	16704	16729	16769	16804	16857	16951	17046	17082	17119	17151
13305	13413	16008	16302	16489	16594	16614	16634	16683	16705	16730	16771	16806	16858	16953	17057	17083	17121	17152
13306	13414	16010	16340	16502	16595	16615	16635	16684	16706	16731	16773	16809	16865	16966	17058	17084	17122	17153
13308	13415	16070	16369	16525	16596	16616	16636	16685	16707	16732	16774	16810	16866	16979	17059	17085	17124	17154
13309	13416	16071	16371	16526	16597	16617	16637	16686	16709	16735	16775	16811	16879	16980	17060	17086	17125	17155
13310	13417	16072	16373	16532	16598	16618	16638	16688	16710	16736	16776	16812	16888	16992	17063	17087	17129	17156
13311	14101	16074	16378	16569	16599	16619	16639	16690	16711	16741	16777	16815	16892	16993	17065	17088	17130	17157
13313	14102	16109	16382	16574	16600	16620	16640	16691	16713	16745	16780	16816	16895	16995	17068	17089	17131	17159
13315	14104	16113	16383	16575	16601	16621	16641	16692	16714	16753	16781	16821	16901	17004	17069	17092	17132	17164
13401	14105	16121	16388	16579	16602	16622	16642	16693	16715	16754	16782	16824	16902	17010	17070	17096	17134	17166
13402	14106	16133	16403	16580	16603	16623	16643	16694	16716	16755	16783	16828	16910	17012	17071	17097	17135	17167
13403	14201	16151	16409	16582	16604	16624	16663	16695	16717	16757	16784	16835	16911	17019	17072	17099	17139	17168
13404	14202	16175	16410	16583	16605	16625	16664	16696	16718	16758	16790	16836	16921	17025	17073	17100	17140	17169
13405	14203	16177	16414	16584	16606	16626	16665	16697	16719	16759	16793	16837	16923	17028	17074	17102	17142	17170

We plotted a line plot for the same.



We plotted a Scatter plot between two features as Id and KernelId.



For UserFollowers Dataset:

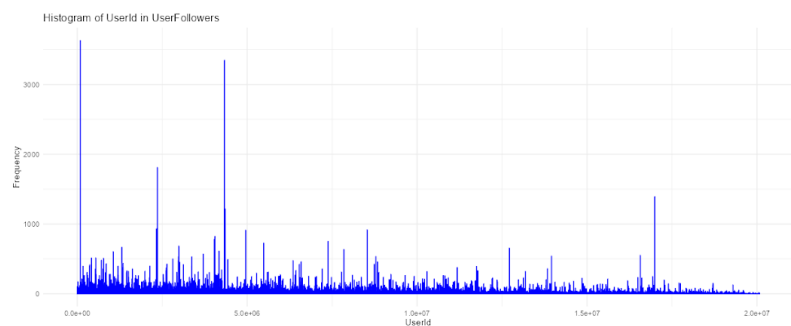
Using UserFollowers Dataset, this dataset have four features as Id, UserId, FollowingUserId, CreationDate

We plotted a histogram between frequency and UserId.

Plots of UserFollowers

Number of bins for histogram:

30



We also plotted a scatter plot between two features as Id and FollowingUserId.

