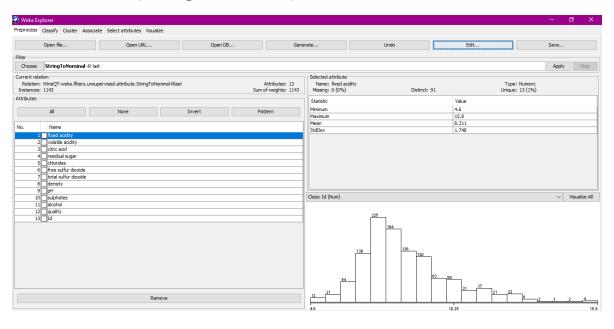
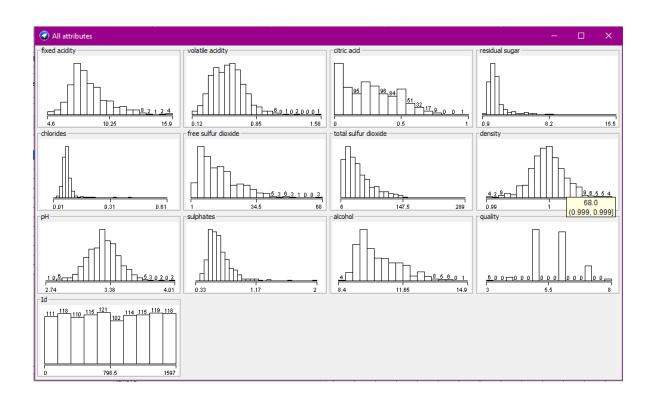
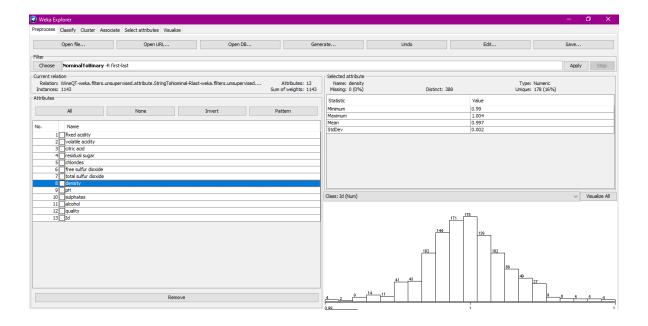
LabelEncoder (StringToNominal)

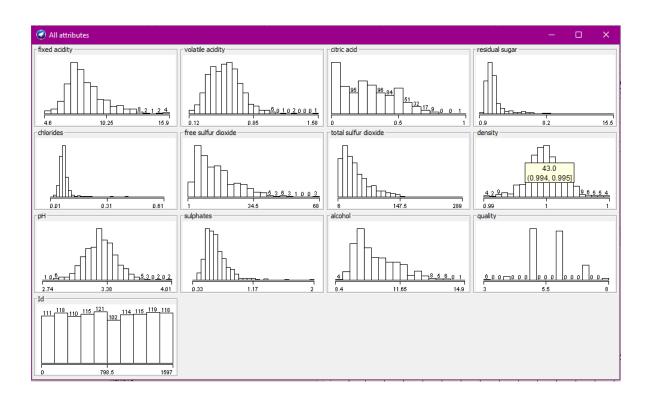




elati	on: WineQT-weka	.filters.unsupervise	d.attribute.St	ringToNominal-Rlas	t							
lo.	1: fixed acidity Numeric	2: volatile acidity Numeric	3: citric acid Numeric	4: residual sugar Numeric	5: chlorides Numeric	6: free sulfur dioxide Numeric	7: total sulfur dioxide Numeric	8: density Numeric	9: pH Numeric	10: sulphates Numeric	11: alcohol Numeric	12: quality Numeric
	7.4	0.7	0.0	1.9	0.076	11.0	34.0	0.9978	3.51	0.56	9.4	5.0
	7.8	0.88	0.0	2.6	0.098	25.0	67.0	0.9968	3.2	0.68	9.8	5.0
	7.8	0.76	0.04	2.3	0.092	15.0	54.0	0.997	3.26	0.65	9.8	5.0
	11.2	0.28	0.56	1.9	0.075	17.0	60.0	0.998	3.16	0.58	9.8	6.0
	7.4	0.7	0.0	1.9	0.076	11.0	34.0	0.9978	3.51	0.56	9.4	5.0
	7.4	0.66	0.0	1.8	0.075	13.0	40.0	0.9978	3.51	0.56	9.4	5.0
	7.9	0.6	0.06	1.6	0.069	15.0	59.0	0.9964	3.3	0.46	9.4	5.0
	7.3	0.65	0.0	1.2	0.065	15.0	21.0	0.9946	3.39	0.47	10.0	7.0
	7.8	0.58	0.02	2.0	0.073	9.0	18.0	0.9968	3.36	0.57	9.5	7.0
0	6.7	0.58	0.08	1.8	0.097	15.0	65.0	0.9959	3.28	0.54	9.2	5.0
1	5.6	0.615	0.0	1.6	0.089	16.0	59.0	0.9943	3.58	0.52	9.9	5.0
2	7.8	0.61	0.29	1.6	0.114	9.0	29.0	0.9974	3.26	1.56	9.1	5.0
3	8.5	0.28	0.56	1.8	0.092	35.0	103.0	0.9969	3.3	0.75	10.5	7.0
4	7.9	0.32	0.51	1.8	0.341	17.0	56.0	0.9969	3.04	1.08	9.2	6.0
5	7.6	0.39	0.31	2.3	0.082	23.0	71.0	0.9982	3.52	0.65	9.7	5.0
5	7.9	0.43	0.21	1.6	0.106	10.0	37.0	0.9966	3.17	0.91	9.5	5.0
7	8.5	0.49	0.11	2.3	0.084	9.0	67.0	0.9968	3.17	0.53	9.4	5.0
В	6.9	0.4	0.14	2.4	0.085	21.0	40.0	0.9968	3.43	0.63	9.7	6.0
9	6.3	0.39	0.16	1.4	0.08	11.0	23.0	0.9955	3.34	0.56	9.3	5.0
0	7.6	0.41	0.24	1.8	0.08	4.0	11.0	0.9962	3.28	0.59	9.5	5.0
1	7.1	0.71	0.0	1.9	0.08	14.0	35.0	0.9972	3.47	0.55	9.4	5.0
2	7.8	0.645	0.0	2.0	0.082	8.0	16.0	0.9964	3.38	0.59	9.8	6.0
3	6.7	0.675	0.07	2.4	0.089	17.0	82.0	0.9958	3.35	0.54	10.1	5.0
4	8.3	0.655	0.12	2.3	0.083	15.0	113.0	0.9966	3.17	0.66	9.8	5.0
5	5.2	0.32	0.25	1.8	0.103	13.0	50.0	0.9957	3.38	0.55	9.2	5.0
5	7.8	0.645	0.0	5.5	0.086	5.0	18.0	0.9986	3.4	0.55	9.6	6.0
7	7.8	0.6	0.14	2.4	0.086	3.0	15.0	0.9975	3.42	0.6	10.8	6.0
В	8.1	0.38	0.28	2.1	0.066	13.0	30.0	0.9968	3.23	0.73	9.7	7.0
9	7.3	0.45	0.36	5.9	0.074	12.0	87.0	0.9978	3.33	0.83	10.5	5.0
												2

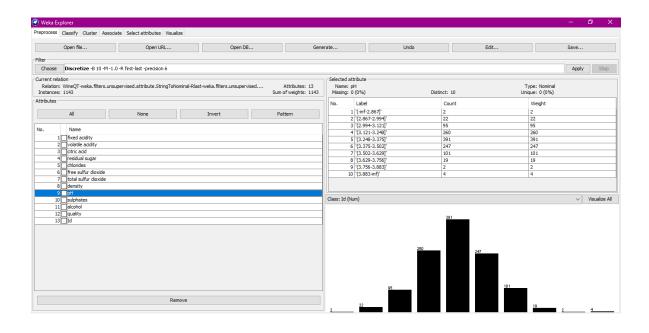
OneHotEncoder (NominalToBinary)

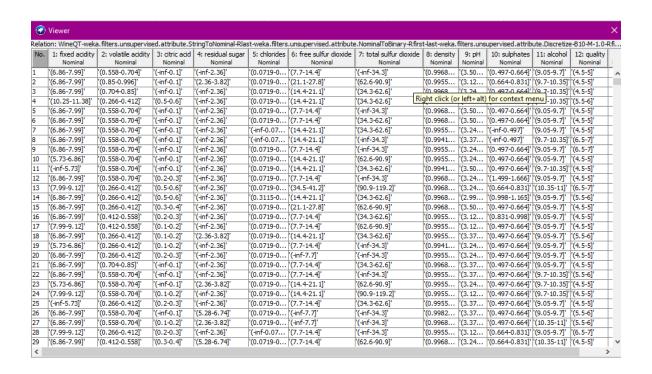


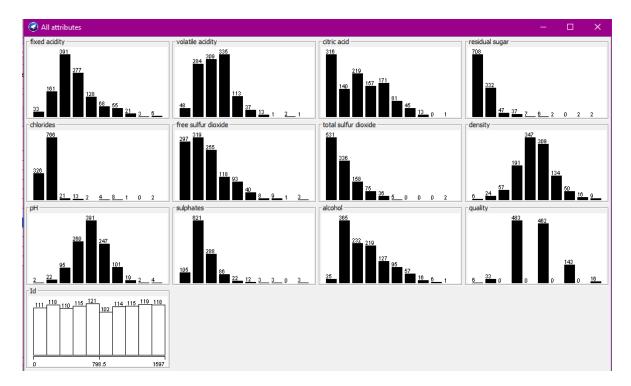


	Viewer											
							.NominalToBinary-Rfirs					
۷o.	1: fixed acidity Numeric	2: volatile acidity	3: citric acid Numeric	4: residual sugar Numeric	5: chlorides Numeric	6: free sulfur dioxide Numeric	7: total sultur dioxide Numeric	8: density Numeric	9: pH Numeric	10: sulphates Numeric	11: alcohol Numeric	12: quality Numeric
	7.4		0.0	1.9		11.0	34.0		3,51	0.56	9,4	
	7.4		0.0	2.6	0.076	25.0	67.0		3.2	0.56	9.8	
_	7.8		0.04	2.3	0.092	15.0	54.0		3.26	0.65	9.8	
_	11.2		0.56	1.9	0.075	17.0	60.0		3.16	0.58	9.8	
	7.4		0.0	1.9	0.075	11.0	34.0		3.51	0.56	9.4	
	7.4		0.0	1.8	0.075	13.0	40.0		3.51	0.56	9.4	
	7.9		0.06	1.6	0.069	15.0	59.0		3.3	0.46	9.4	
	7.3		0.0	1.2		15.0	21.0		3,39	0.47	10.0	
	7.8		0.02	2.0	0.073	9.0	18.0		3.36	0.57	9.5	
0	6.7	0.58	0.08	1.8	0.097	15.0	65.0	0.9959	3,28	0.54	9.2	5.0
1	5.6	0.615	0.0	1.6	0.089	16.0	59.0	0.9943	3.58	0.52	9.9	5.0
2	7.8	0.61	0.29	1.6	0.114	9.0	29.0	0.9974	3.26	1.56	9.1	5.0
3	8.5	0.28	0.56	1.8	0.092	35.0	103.0	0.9969	3.3	0.75	10.5	7.0
4	7.9	0.32	0.51	1.8	0.341	17.0	56.0	0.9969	3.04	1.08	9.2	6.0
5	7.6	0.39	0.31	2.3	0.082	23.0	71.0	0.9982	3.52	0.65	9.7	5.0
6	7.9	0.43	0.21	1.6	0.106	10.0	37.0	0.9966	3.17	0.91	9.5	5.0
7	8.5	0.49	0.11	2.3	0.084	9.0	67.0	0.9968	3.17	0.53	9.4	5.0
8	6.9	0.4	0.14	2.4	0.085	21.0	40.0	0.9968	3.43	0.63	9.7	6.0
9	6.3	0.39	0.16	1.4	0.08	11.0	23.0	0.9955	3.34	0.56	9.3	5.0
0	7.6	0.41	0.24	1.8	0.08	4.0	11.0	0.9962	3.28	0.59	9.5	5.0
1	7.1	0.71	0.0	1.9	0.08	14.0	35.0	0.9972	3.47	0.55	9.4	5.0
2	7.8	0.645	0.0	2.0	0.082	8.0	16.0	0.9964	3.38	0.59	9.8	6.0
3	6.7	0.675	0.07	2.4	0.089	17.0	82.0	0.9958	3.35	0.54	10.1	5.0
4	8.3	0.655	0.12	2.3	0.083	15.0	113.0	0.9966	3.17	0.66	9.8	5.0
5	5.2	0.32	0.25	1.8	0.103	13.0	50.0	0.9957	3.38	0.55	9.2	5.0
6	7.8	0.645	0.0	5.5	0.086	5.0	18.0	0.9986	3.4	0.55	9.6	6.0
7	7.8	0.6	0.14	2.4	0.086	3.0	15.0	0.9975	3.42	0.6	10.8	6.0
8	8.1	0.38	0.28	2.1	0.066	13.0	30.0	0.9968	3.23	0.73	9.7	7.0
9	7.3	0.45	0.36	5.9	0.074	12.0	87.0	0.9978	3.33	0.83	10.5	5.0
<												

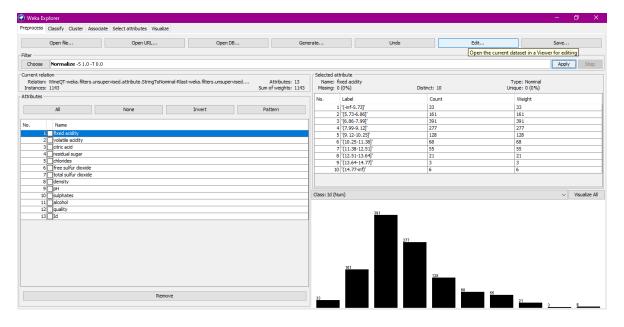
Discretización (Discretize)







Normalización (Normalize)



②	Viewer												X
Relati	on: WineQT-weka	a.filters.unsupervis	ed.attribute.St	ringToNominal-Rlas	st-weka.filters	.unsupervised.attribute	e.NominalToBinary-Rfirs	t-last-weka.	filters.uns	upervised.attrib	ute.Discretize	e-B10-M-1.0-F	₹fi
No.	1: fixed acidity Nominal	2: volatile acidity Nominal	3: citric acid	4: residual sugar Nominal	5: chlorides Nominal	6: free sulfur dioxide Nominal	7: total sulfur dioxide	8: density Nominal	9: pH Nominal	10: sulphates Nominal	11: alcohol Nominal	12: quality Nominal	
1	'(6.86-7.991'	'(0.558-0.7041'	'(-inf-0.1]'	'(-inf-2.36]'	'(0.0719-0		'(-inf-34.3]'	'(0.9968	'(3.50	'(0.497-0.664]'		'(4.5-5]'	الم
2	'(6.86-7.99]'	'(0.85-0.996]'	'(-inf-0.1]'	'(2.36-3.82]'	'(0.0719-0		'(62.6-90.9]'	'(0.9955		'(0.664-0.831]'			- ^
3	'(6.86-7.991'	'(0.704-0.85]'	'(-inf-0.1]'		'(0.0719-0		'(34.3-62.6]'	'(0.9968	-	'(0.497-0.664]'	-		
4	'(10.25-11.38]'	'(0.266-0.412]'	'(0.5-0.6]'		'(0.0719-0		'(34.3-62.6]'	'(0.9968	'(3.12	'(0.497-0.664]'	-		
5	'(6.86-7.99]'	'(0.558-0.704]'		'(-inf-2,36]'	'(0.0719-0		'(-inf-34.3]'	'(0.9968		'(0.497-0.664]'		'(4.5-5]'	-
6	'(6.86-7.99]'	'(0.558-0.704]'	'(-inf-0.1]'	'(-inf-2.36]'	'(0.0719-0		'(34.3-62.6]'	'(0.9968		'(0.497-0.664]'		'(4.5-5]'	_
7	'(6.86-7.99]'	'(0.558-0.704]'	'(-inf-0.1]'	'(-inf-2.36]'	'(-inf-0.07	'(14.4-21.1]'	'(34.3-62.6]'	'(0.9955	'(3.24	'(-inf-0.497]'	'(9.05-9.7]'	'(4.5-5]'	-
8	'(6.86-7.99]'	'(0.558-0.704]'	'(-inf-0.1]'	'(-inf-2.36]'	'(-inf-0.07	'(14.4-21.1]'	'(-inf-34.3]'	'(0.9941	'(3.37	'(-inf-0.497]'	'(9.7-10.35]'	'(6.5-7]'	_
9	'(6.86-7.99]'	'(0.558-0.704]'	'(-inf-0.1]'	'(-inf-2.36]'	'(0.0719-0	'(7.7-14.4]'	'(-inf-34.3]'	'(0.9955	'(3.24	'(0.497-0.664]'	'(9.05-9.7]'	'(6.5-7]'	
10	'(5.73-6.86]'	'(0.558-0.704]'	'(-inf-0.1]'	'(-inf-2.36]'	'(0.0719-0	'(14.4-21.1]'	'(62.6-90.9]'	'(0.9955	'(3.24	'(0.497-0.664]'	'(9.05-9.7]'	'(4.5-5]'	_
11	'(-inf-5.73]'	'(0.558-0.704]'	'(-inf-0.1]'	'(-inf-2.36]'	'(0.0719-0	'(14.4-21.1]'	'(34.3-62.6]'	'(0.9941	'(3.50	'(0.497-0.664]'	'(9.7-10.35]'	'(4.5-5]'	
12	'(6.86-7.99]'	'(0.558-0.704]'	'(0.2-0.3]'	'(-inf-2.36]'	'(0.0719-0	'(7.7-14.4]'	'(-inf-34.3]'	'(0.9968	'(3.24	'(1.499-1.666]'	'(9.05-9.7]'	'(4.5-5]'	
13	'(7.99-9.12]'	'(0.266-0.412]'	'(0.5-0.6]'	'(-inf-2.36]'	'(0.0719-0	'(34.5-41.2]'	'(90.9-119.2]'	'(0.9968	'(3.24	'(0.664-0.831]'	'(10.35-11]'	'(6.5-7]'	_
14	'(6.86-7.99]'	'(0.266-0.412]'	'(0.5-0.6]'	'(-inf-2.36]'	'(0.3115-0	'(14.4-21.1]'	'(34.3-62.6]'	'(0.9968	'(2.99	'(0.998-1.165]'	'(9.05-9.7]'	'(5.5-6]'	
15	'(6.86-7.99]'	'(0.266-0.412]'	'(0.3-0.4]'	'(-inf-2.36]'	'(0.0719-0	'(21.1-27.8]'	'(62.6-90.9]'	'(0.9968	'(3.50	'(0.497-0.664]'	'(9.05-9.7]'	'(4.5-5]'	
16	'(6.86-7.99]'	'(0.412-0.558]'	'(0.2-0.3]'	'(-inf-2,36]'	'(0.0719-0	'(7.7-14.4]'	'(34.3-62.6]'	'(0.9955	'(3.12	'(0.831-0.998]'	'(9.05-9.7]'	'(4.5-5]'	
17	'(7.99-9.12]'	'(0.412-0.558]'	'(0.1-0.2]'	'(-inf-2.36]'	'(0.0719-0	'(7.7-14.4]'	'(62.6-90.9]'	'(0.9955	'(3.12	'(0.497-0.664]'	'(9.05-9.7]'	'(4.5-5]'	
18	'(6.86-7.99]'	'(0.266-0.412]'	'(0.1-0.2]'	'(2.36-3.82]'	'(0.0719-0	'(14.4-21.1]'	'(34.3-62.6]'	'(0.9955	'(3.37	'(0.497-0.664]'	'(9.05-9.7]'	'(5.5-6]'	
19	'(5.73-6.86]'	'(0.266-0.412]'	'(0.1-0.2]'	'(-inf-2.36]'	'(0.0719-0	'(7.7-14.4]'	'(-inf-34.3]'	'(0.9941	'(3.24	'(0.497-0.664]'	'(9.05-9.7]'	'(4.5-5]'	
20	'(6.86-7.99]'	'(0.266-0.412]'	'(0.2-0.3]'	'(-inf-2.36]'	'(0.0719-0	'(-inf-7.7]'	'(-inf-34.3]'	'(0.9955	'(3.24	'(0.497-0.664]'	'(9.05-9.7]'	'(4.5-5]'	
21	'(6.86-7.99]'	'(0.704-0.85]'	'(-inf-0.1]'	'(-inf-2.36]'	'(0.0719-0	'(7.7-14.4]'	'(34.3-62.6]'	'(0.9968	'(3.37	'(0.497-0.664]'	'(9.05-9.7]'	'(4.5-5]'	
22	'(6.86-7.99]'	'(0.558-0.704]'	'(-inf-0.1]'	'(-inf-2.36]'	'(0.0719-0	'(7.7-14.4]'	'(-inf-34.3]'	'(0.9955	'(3.37	'(0.497-0.664]'	'(9.7-10.35]'	'(5.5-6]'	
23	'(5.73-6.86]'	'(0.558-0.704]'	'(-inf-0.1]'	'(2.36-3.82]'	'(0.0719-0	'(14.4-21.1]'	'(62.6-90.9]'	'(0.9955	'(3.24	'(0.497-0.664]'	'(9.7-10.35]'	'(4.5-5]'	
24	'(7.99-9.12]'	'(0.558-0.704]'	'(0.1-0.2]'	'(-inf-2.36]'	'(0.0719-0	'(14.4-21.1]'	'(90.9-119.2]'	'(0.9955	'(3.12	'(0.497-0.664]'	'(9.7-10.35]'	'(4.5-5]'	
25	'(-inf-5.73]'	'(0.266-0.412]'	'(0.2-0.3]'	'(-inf-2.36]'	'(0.0719-0	'(7.7-14.4]'	'(34.3-62.6]'	'(0.9955	'(3.37	'(0.497-0.664]'	'(9.05-9.7]'	'(4.5-5]'	
26	'(6.86-7.99]'	'(0.558-0.704]'	'(-inf-0.1]'	'(5.28-6.74]'	'(0.0719-0		'(-inf-34.3]'	'(0.9982	'(3.37	'(0.497-0.664]'	'(9.05-9.7]'	'(5.5-6]'	
27	'(6.86-7.99]'	'(0.558-0.704]'	'(0.1-0.2]'	'(2.36-3.82]'	'(0.0719-0	'(-inf-7.7]'	'(-inf-34.3]'	'(0.9968	'(3.37	'(0.497-0.664]'	'(10.35-11]'	'(5.5-6]'	
28	'(7.99-9.12]'	'(0.266-0.412]'	'(0.2-0.3]'	'(-inf-2.36]'	'(-inf-0.07	'(7.7-14.4]'	'(-inf-34.3]'	'(0.9955	'(3.12	'(0.664-0.831]'	'(9.05-9.7]'	'(6.5-7]'	
29	'(6.86-7.99]'	'(0.412-0.558]'	'(0.3-0.4]'	'(5.28-6.74]'	'(0.0719-0	'(7.7-14.4]'	'(62.6-90.9]'	'(0.9968	(3.24	'(0.664-0.831]'	(10.35-11)	'(4.5-5]'	~

