dataset	Logistic Regression					Gaussian Naive Bayes				
	LR	RS	GES	GES-A	GES-B	GNB	RS	GES	GES-A	GES-B
	1	2	3	4	5	A	B	c	d	e
australian	**0.762**	0.728	**0.808**	**0.794**	**0.800**	0.719	0.732	**0.834**	**0.852**	**0.844**
	-	-	2	2	2	-	-	a,b	a,b	a,b
glass-0-1-2-3-vs-4-5-6	**0.775**	0.385	**0.800**	**0.770**	**0.695**	**0.709**	**0.612**	**0.719**	**0.656**	**0.728**
	2	-	2	2	2	-	-	-	-	-
glass-0-1-4-6-vs-2	0.000	**0.215**	**0.147**	**0.214**	**0.267**	**0.219**	**0.096**	**0.252**	**0.267**	**0.242**
	-	1	1	1	1	-	-	-	-	-
glass-0-1-5-vs-2	0.000	**0.179**	**0.197**	**0.194**	**0.205**	**0.218**	0.014	**0.288**	**0.340**	**0.271**
	-	1	1	-	1	b	-	b	b	-
glass-0-1-6-vs-2	0.000	**0.199**	**0.181**	**0.172**	**0.168**	**0.199**	**0.088**	**0.244**	**0.220**	**0.273**
	-	1	1	1	1	-	-	-	-	-
glass-0-1-6-vs-5	**0.149**	**0.000**	**0.115**	**0.015**	**0.000**	**0.760**	0.180	**0.760**	**0.648**	**0.648**
	-	-	-	-	-	b	-	b	b	b
glass-0-4-vs-5	**0.507**	0.040	**0.711**	**0.333**	**0.360**	**0.960**	0.268	**0.773**	**0.960**	**0.727**
	2	-	2	-	-	b	-	b	b	b
glass-0-6-vs-5	**0.333**	**0.000**	**0.144**	**0.180**	**0.160**	**0.893**	0.349	**0.893**	**0.867**	**0.960**
	-	-	-	-	-	b	-	b	b	b
glass0	0.516	0.000	**0.699**	**0.701**	**0.660**	**0.642**	**0.627**	**0.628**	**0.625**	**0.632**
	2	-	2	1,2	2	-	-	-	-	-
glass1	0.243	0.000	**0.583**	**0.524**	**0.563**	**0.604**	**0.490**	**0.634**	**0.626**	**0.630**
	2	-	1,2	1,2	1,2	-	-	-	-	-
glass2	0.000	**0.165**	**0.152**	**0.068**	**0.158**	**0.189**	**0.168**	**0.216**	**0.189**	**0.190**
	-	1	-	-	1	-	-	-	-	-
glass4	**0.167**	**0.200**	**0.441**	**0.428**	**0.541**	**0.237**	0.000	**0.257**	**0.300**	**0.257**
	-	-	-	-	-	b	-	-	b	-
glass5	**0.149**	**0.200**	**0.333**	**0.200**	**0.348**	**0.768**	0.140	**0.634**	**0.457**	**0.768**
	-	-	-	-	-	b	-	b	-	b
glass6	**0.759**	0.238	**0.811**	**0.832**	**0.778**	**0.772**	**0.809**	**0.775**	**0.738**	**0.800**
	2	-	2	2	2	-	-	-	-	-
heart	**0.822**	0.207	**0.796**	**0.787**	**0.775**	**0.802**	0.769	**0.816**	**0.812**	**0.837**
	2	-	2	2	2	-	-	-	-	b
hepatitis	**0.919**	**0.912**	**0.912**	**0.903**	**0.899**	**0.719**	0.615	**0.889**	**0.840**	**0.795**
	-	-	-	-	-	-	-	b	-	-
page-blocks-1-3-vs-4	**0.533**	**0.421**	**0.548**	**0.550**	**0.568**	**0.493**	**0.347**	**0.419**	**0.419**	**0.419**
	-	-	-	-	-	-	-	-	-	-
pima	**0.629**	0.000	**0.634**	**0.646**	**0.635**	**0.621**	0.501	**0.600**	**0.621**	**0.616**
	2	-	2	2	2	b	-	b	b	b
shuttle-c0-vs-c4	**0.996**	0.031	**0.996**	**0.996**	**0.996**	**0.980**	**0.968**	**0.988**	**0.984**	**0.984**
	2	-	2	2	2	-	-	-	-	-
shuttle-c2-vs-c4	**1.000**	**0.960**	**0.960**	**1.000**	**0.960**	**0.813**	**0.800**	**0.800**	**0.800**	**0.867**
	-	-	-	-	-	-	-	-	-	-
vowel0	**0.540**	0.113	**0.637**	**0.553**	**0.573**	**0.709**	**0.717**	**0.736**	**0.716**	**0.726**
	2	-	2	2	2	-	-	-	-	-
wisconsin	**0.949**	0.048	**0.909**	**0.891**	**0.868**	**0.943**	**0.941**	**0.943**	**0.937**	**0.933**
	2	-	2	2	2	-	-	-	-	-
yeast-0-2-5-6-vs-3-7-8-9	**0.056**	**0.000**	**0.067**	**0.024**	**0.065**	**0.262**	0.026	**0.410**	**0.384**	**0.296**
	2	-	-	-	-	b	-	b	b	b
yeast-0-2-5-7-9-vs-3-6-8	**0.315**	0.000	**0.683**	**0.347**	0.055	0.201	0.174	**0.752**	**0.677**	**0.748**
	2,5	-	2,5	-	-	b	-	a,b	a,b	a,b
yeast-0-3-5-9-vs-7-8	**0.036**	**0.000**	**0.114**	**0.114**	**0.000**	**0.269**	0.148	**0.377**	**0.269**	**0.345**
	-	-	-	-	-	-	-	b	-	-
yeast-0-5-6-7-9-vs-4	**0.000**	**0.000**	**0.000**	**0.067**	**0.000**	0.175	0.067	**0.521**	**0.480**	**0.531**
	-	-	-	-	-	b	-	a,b	a,b	a,b
yeast-2-vs-4	**0.236**	0.000	**0.186**	**0.151**	**0.359**	0.297	**0.508**	**0.770**	**0.713**	**0.774**
	2	-	-	-	2	-	-	a	a	a
yeast-2-vs-8	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.254**	**0.249**	**0.658**	**0.658**	**0.658**
	-	-	-	-	-	-	-	-	-	-
yeast1	0.329	0.374	**0.567**	**0.563**	**0.571**	0.457	**0.502**	**0.529**	**0.519**	**0.549**
	-	-	1,2	1,2	1,2	-	-	a	a	a
yeast3	0.153	0.225	**0.756**	**0.729**	**0.758**	0.236	0.548	**0.778**	**0.778**	**0.767**
	-	-	1,2	1,2	1,2	-	a	a,b	a,b	a,b
yeast5	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	0.154	0.321	**0.586**	**0.664**	**0.669**
	-	-	-	-	-	-	a	a,b	a,b	a,b

Table 1: F-score

dataset	Logistic Regression					Gaussian Naive Bayes				
	LR	RS	GES	GES-A	GES-B	GNB	RS	GES	GES-A	GES-B
	1	2	3	4	5	A	B	c	d	e
australian	**0.788**	0.711	**0.812**	**0.827**	**0.815**	0.752	0.763	**0.884**	**0.865**	**0.864**
	2	-	2	2	2	-	-	a,b	a,b	a,b
glass-0-1-2-3-vs-4-5-6	**0.833**	0.000	**0.891**	**0.878**	**0.926**	**0.792**	**0.685**	**0.789**	**0.780**	**0.775**
	2	-	2	2	2	-	-	-	-	-
glass-0-1-4-6-vs-2	0.000	**0.338**	**0.519**	**0.471**	**0.481**	**0.495**	**0.282**	**0.603**	**0.614**	**0.619**
	-	-	1	1	1	-	-	-	-	-
glass-0-1-5-vs-2	0.000	0.000	**0.591**	**0.592**	**0.596**	**0.510**	0.051	**0.611**	**0.559**	**0.638**
	-	-	1,2	1,2	1,2	b	-	b	b	b
glass-0-1-6-vs-2	0.000	**0.286**	**0.421**	**0.458**	**0.537**	**0.481**	**0.258**	**0.494**	**0.578**	**0.463**
	-	-	1	1	1	-	-	-	-	-
glass-0-1-6-vs-5	**0.259**	0.000	**0.555**	**0.411**	**0.417**	**0.930**	0.691	**0.788**	**0.935**	**0.735**
	-	-	2	-	2	b	-	-	b	-
glass-0-4-vs-5	**0.624**	0.000	**0.893**	**0.394**	0.337	**0.994**	0.584	**0.822**	**0.994**	**0.994**
	2	-	2,5	-	-	b	-	-	b	b
glass-0-6-vs-5	**0.461**	0.000	**0.362**	**0.318**	**0.435**	**0.936**	**0.715**	**0.936**	**0.936**	**0.936**
	2	-	-	-	2	-	-	-	-	-
glass0	**0.619**	0.000	**0.739**	**0.749**	**0.757**	**0.632**	**0.605**	**0.624**	**0.633**	**0.624**
	2	-	2	2	2	-	-	-	-	-
glass1	0.377	0.000	**0.564**	**0.589**	**0.514**	**0.543**	**0.529**	**0.553**	**0.505**	**0.548**
	2	-	1,2	1,2	2	-	-	-	-	-
glass2	0.000	**0.385**	**0.397**	**0.395**	**0.536**	**0.568**	**0.459**	**0.562**	**0.529**	**0.514**
	-	1	1	1	1	-	-	-	-	-
glass4	0.228	0.231	**0.811**	**0.595**	**0.663**	**0.341**	0.000	**0.341**	**0.342**	**0.523**
	-	-	1,2	-	-	b	-	b	b	b
glass5	0.274	0.200	**0.639**	**0.677**	**0.768**	**0.929**	0.672	**0.788**	**0.744**	**0.885**
	-	-	-	-	1,2	b	-	-	-	b
glass6	**0.855**	0.000	**0.879**	**0.898**	**0.896**	**0.862**	**0.856**	**0.864**	**0.890**	**0.844**
	2	-	2	2	2	-	-	-	-	-
heart	**0.841**	0.306	**0.828**	**0.804**	**0.836**	**0.822**	**0.792**	**0.825**	**0.820**	**0.838**
	2	-	2	2	2	-	-	-	-	-
hepatitis	**0.634**	**0.844**	**0.628**	**0.748**	**0.737**	**0.678**	0.623	**0.778**	**0.797**	**0.718**
	-	-	-	-	-	-	-	-	b	-
page-blocks-1-3-vs-4	**0.688**	**0.643**	**0.921**	**0.902**	**0.908**	**0.653**	**0.543**	**0.581**	**0.547**	**0.548**
	-	-	-	-	-	-	-	-	-	-
pima	**0.703**	0.000	**0.722**	**0.718**	**0.703**	**0.701**	0.595	**0.699**	**0.685**	**0.695**
	2	-	2	2	2	b	-	b	b	b
shuttle-c0-vs-c4	**0.996**	0.081	**0.996**	**0.996**	**0.996**	**0.991**	**0.994**	**0.992**	**0.996**	**0.996**
	2	-	2	2	2	-	-	-	-	-
shuttle-c2-vs-c4	**1.000**	**0.996**	**0.996**	**0.996**	**0.996**	**0.983**	**0.800**	**0.800**	**0.937**	**0.937**
	-	-	-	-	-	-	-	-	-	-
vowel0	**0.719**	0.161	**0.703**	**0.695**	**0.758**	**0.873**	**0.814**	**0.829**	**0.821**	**0.803**
	2	-	2	2	2	-	-	-	-	-
wisconsin	**0.959**	0.120	**0.885**	**0.907**	**0.888**	**0.962**	**0.958**	**0.954**	**0.965**	**0.957**
	2	-	2	2	2	-	-	-	-	-
yeast-0-2-5-6-vs-3-7-8-9	**0.135**	0.000	**0.127**	**0.063**	**0.125**	**0.364**	0.013	**0.456**	**0.439**	**0.363**
	2	-	-	-	-	b	-	b	b	b
yeast-0-2-5-7-9-vs-3-6-8	**0.399**	0.000	**0.700**	0.108	0.108	0.393	0.172	**0.905**	**0.885**	**0.846**
	2	-	2,4,5	-	-	b	-	a,b	a,b	a,b
yeast-0-3-5-9-vs-7-8	**0.063**	**0.000**	**0.126**	**0.089**	**0.000**	0.346	0.138	**0.661**	**0.577**	**0.602**
	-	-	-	-	-	-	-	a,b	a,b	a,b
yeast-0-5-6-7-9-vs-4	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	0.182	0.112	**0.754**	**0.727**	**0.751**
	-	-	-	-	-	-	-	a,b	a,b	a,b
yeast-2-vs-4	**0.332**	**0.000**	**0.216**	**0.000**	**0.354**	0.432	0.611	**0.850**	**0.882**	**0.864**
	2,4	-	-	-	-	-	-	a	a,b	a
yeast-2-vs-8	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.564**	**0.513**	**0.745**	**0.723**	**0.749**
	-	-	-	-	-	-	-	-	-	-
yeast1	0.456	0.501	**0.693**	**0.692**	**0.692**	0.206	**0.621**	**0.669**	**0.670**	**0.679**
	-	-	1,2	1,2	1,2	-	a	a	a	a
yeast3	0.282	0.384	**0.897**	**0.896**	**0.907**	0.446	0.680	**0.894**	**0.912**	**0.905**
	-	-	1,2	1,2	1,2	-	a	a,b	a,b	a,b
yeast5	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	0.811	**0.927**	**0.941**	**0.966**	**0.964**
	-	-	-	-	-	-	a	a	a	a

Table 2: G-mean

dataset	Logistic Regression					Gaussian Naive Bayes				
	LR	RS	GES	GES-A	GES-B	GNB	RS	GES	GES-A	GES-B
	1	2	3	4	5	A	B	c	d	e
australian	**0.791**	0.727	**0.812**	**0.823**	**0.818**	0.770	0.781	**0.869**	**0.863**	**0.853**
	2	-	2	2	2	-	-	a,b	a,b	a,b
glass-0-1-2-3-vs-4-5-6	**0.852**	0.500	**0.904**	**0.920**	**0.911**	**0.822**	**0.770**	**0.851**	**0.810**	**0.835**
	2	-	2	2	2	-	-	-	-	-
glass-0-1-4-6-vs-2	0.500	**0.611**	**0.544**	**0.619**	**0.642**	**0.561**	**0.477**	**0.665**	**0.643**	**0.640**
	-	-	-	-	1	-	-	-	-	-
glass-0-1-5-vs-2	**0.500**	**0.500**	**0.551**	**0.537**	**0.560**	**0.549**	0.446	**0.686**	**0.681**	**0.627**
	-	-	-	-	-	-	-	b	b	-
glass-0-1-6-vs-2	**0.500**	**0.583**	**0.607**	**0.636**	**0.563**	**0.547**	0.448	**0.588**	**0.657**	**0.583**
	-	-	1	-	-	-	-	-	b	-
glass-0-1-6-vs-5	**0.584**	**0.500**	**0.591**	**0.650**	**0.603**	**0.939**	0.746	**0.889**	**0.884**	**0.893**
	-	-	2	-	2	b	-	-	-	-
glass-0-4-vs-5	**0.750**	0.500	**0.894**	**0.706**	**0.832**	**0.994**	0.679	**0.944**	**0.994**	**0.994**
	2	-	2	-	2	b	-	b	b	b
glass-0-6-vs-5	**0.679**	**0.500**	**0.614**	**0.643**	**0.520**	**0.945**	0.770	**0.995**	**0.945**	**0.940**
	-	-	-	-	-	-	-	b	-	-
glass0	**0.657**	0.500	**0.763**	**0.776**	**0.769**	**0.701**	**0.684**	**0.705**	**0.701**	**0.705**
	2	-	2	2	2	-	-	-	-	-
glass1	**0.478**	0.493	**0.583**	**0.603**	**0.571**	**0.634**	**0.574**	**0.574**	**0.583**	**0.581**
	-	-	-	2	2	-	-	-	-	-
glass2	**0.500**	**0.565**	**0.567**	**0.544**	**0.534**	**0.604**	**0.551**	**0.672**	**0.632**	**0.682**
	-	-	-	-	-	-	-	-	-	-
glass4	0.494	0.567	**0.839**	**0.829**	**0.874**	**0.508**	**0.435**	**0.515**	**0.512**	**0.477**
	-	-	1,2	1,2	1,2	-	-	-	-	-
glass5	**0.594**	**0.600**	**0.790**	**0.793**	**0.752**	**0.938**	0.729	**0.888**	**0.949**	**0.949**
	-	-	-	-	-	b	-	-	b	b
glass6	**0.876**	0.500	**0.926**	**0.879**	**0.912**	**0.876**	**0.878**	**0.878**	**0.895**	**0.903**
	2	-	2	2	2	-	-	-	-	-
heart	**0.843**	0.552	**0.810**	**0.828**	**0.815**	**0.823**	**0.795**	**0.804**	**0.815**	**0.823**
	2	-	2	2	2	-	-	-	-	-
hepatitis	**0.745**	**0.849**	**0.745**	**0.760**	**0.759**	0.722	0.689	**0.810**	**0.796**	**0.853**
	-	-	-	-	-	-	-	-	-	a,b
page-blocks-1-3-vs-4	**0.790**	**0.748**	**0.932**	**0.904**	**0.909**	**0.762**	**0.692**	**0.714**	**0.697**	**0.695**
	-	-	-	-	-	-	-	-	-	-
pima	**0.722**	0.500	**0.725**	**0.727**	**0.723**	**0.713**	0.653	**0.706**	**0.708**	**0.707**
	2	-	2	2	2	b	-	-	b	b
shuttle-c0-vs-c4	**0.996**	0.508	**0.996**	**0.996**	**0.996**	**0.991**	**0.994**	**0.992**	**0.996**	**0.996**
	2	-	2	2	2	-	-	-	-	-
shuttle-c2-vs-c4	**1.000**	**0.996**	**0.996**	**0.946**	**0.996**	**0.984**	**0.900**	**0.900**	**0.946**	**0.946**
	-	-	-	-	-	-	-	-	-	-
vowel0	**0.772**	0.533	**0.767**	**0.765**	**0.799**	**0.881**	**0.830**	**0.835**	**0.874**	**0.829**
	2	-	2	2	2	-	-	-	-	-
wisconsin	**0.960**	0.513	**0.919**	**0.915**	**0.907**	**0.962**	**0.958**	**0.955**	**0.965**	**0.959**
	2	-	2	2	2	-	-	-	-	-
yeast-0-2-5-6-vs-3-7-8-9	**0.513**	**0.500**	**0.534**	**0.503**	**0.526**	**0.549**	**0.472**	**0.605**	**0.529**	**0.604**
	-	-	-	-	-	-	-	-	-	-
yeast-0-2-5-7-9-vs-3-6-8	**0.602**	0.500	**0.547**	0.509	**0.562**	0.560	0.486	**0.900**	**0.856**	**0.851**
	2,4	-	2,4	-	-	b	-	a,b	a,b	a,b
yeast-0-3-5-9-vs-7-8	**0.508**	**0.500**	**0.539**	**0.538**	**0.538**	**0.573**	0.513	**0.604**	**0.631**	**0.645**
	-	-	-	-	-	-	-	-	b	b
yeast-0-5-6-7-9-vs-4	**0.500**	**0.500**	**0.500**	**0.500**	**0.507**	0.499	0.501	**0.775**	**0.775**	**0.777**
	-	-	-	-	-	-	-	a,b	a,b	a,b
yeast-2-vs-4	**0.570**	0.500	**0.530**	**0.560**	**0.550**	0.598	0.697	**0.869**	**0.897**	**0.886**
	2	-	-	-	-	-	-	a	a,b	a,b
yeast-2-vs-8	**0.500**	**0.500**	**0.500**	**0.500**	**0.500**	**0.667**	**0.644**	**0.773**	**0.773**	**0.773**
	-	-	-	-	-	-	-	-	-	-
yeast1	0.585	**0.609**	**0.690**	**0.703**	**0.688**	0.518	**0.656**	**0.665**	**0.660**	**0.661**
	-	-	1	1	1	-	a	a	a	a
yeast3	0.542	0.575	**0.911**	**0.897**	**0.908**	0.597	0.729	**0.905**	**0.889**	**0.903**
	-	-	1,2	1,2	1,2	-	a	a,b	a,b	a,b
yeast5	**0.500**	**0.500**	**0.500**	**0.500**	**0.500**	0.829	**0.930**	**0.956**	**0.956**	**0.933**
	-	-	-	-	-	-	a	a	a	a

Table 3: Balanced accuracy score