Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
ecoli-0-1-vs-2-3-5	0.900 ± 0.090	0.894 ± 0.090	0.840 ± 0.091	0.848 ± 0.088	0.882 ± 0.091	0.886 ± 0.096
yeast-1-4-5-8- vs -7	0.633 ± 0.105	0.619 ± 0.106	0.500 ± 0.000	0.530 ± 0.061	0.609 ± 0.104	0.628 ± 0.102
glass2	0.651 ± 0.096	0.652 ± 0.132	0.500 ± 0.000	0.575 ± 0.138	0.758 ± 0.102	0.683 ± 0.097
glass-0-1-4-6-vs-2	0.580 ± 0.122	0.579 ± 0.141	0.500 ± 0.000	0.574 ± 0.137	0.743 ± 0.108	0.645 ± 0.095
glass-0-1-6-vs-2	$\begin{array}{c} 3 \\ 0.556 \pm 0.120 \end{array}$	0.572 ± 0.126	0.500 ± 0.000	$\begin{array}{c} 3 \\ 0.526 \pm 0.140 \end{array}$	0.744 ± 0.103	$^{1,2,3,4}_{0.610 \pm 0.090}$
ecoli-0-1-4-7-vs-2-3-5-6	0.861 ± 0.087	0.863 ± 0.084	0.851 ± 0.079	0.856 ± 0.080	0.854 ± 0.077	0.848 ± 0.077
yeast-0-5-6-7-9-vs-4	0.793 ± 0.058	0.800 ± 0.059	0.536 ± 0.040	0.671 ± 0.088	$0.803 \stackrel{6}{\pm} 0.051$	0.789 ± 0.057
ecoli-0-1-vs-5	0.905 ± 0.091	0.905 ± 0.085	0.886 ± 0.091	0.882 ± 0.081	0.908 ± 0.079	0.910 ± 0.076
yeast-2- vs -8	$0.790 \stackrel{4}{\pm} 0.094$	$0.785 \stackrel{4}{\pm} 0.096$	$0.774 \stackrel{4}{\pm} 0.114$	0.773 ± 0.112	0.781 ± 0.111	0.783 ± 0.113
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	$0.897 \stackrel{2}{\pm} 0.033$	0.902 ± 0.034	0.841 ± 0.043	0.813 ± 0.060	0.907 ± 0.037	0.905 ± 0.036
glass - 0 - 4 - vs - 5	0.944 ± 0.068	0.964 ± 0.024	$0.668 \stackrel{4}{\pm} 0.184$	0.538 ± 0.157	0.841 ± 0.158	0.757 ± 0.175
ecoli-0-3-4-7-vs-5-6	0.905 ± 0.088	0.908 ± 0.086	0.889 ± 0.079	0.890 ± 0.080	0.901 ± 0.086	$0.899 \stackrel{4}{\pm} 0.084$
ecoli-0-1-4-6- vs -5	0.894 ± 0.089	0.888 ± 0.095	0.885 ± 0.087	0.876 ± 0.085	0.903 ± 0.085	0.903 ± 0.085
ecoli4	0.931 ± 0.070	0.932 ± 0.065	0.698 ± 0.125	0.798 ± 0.099	0.940 ± 0.077	0.943 ± 0.070
$page-blocks-1\hbox{-} 3\hbox{-} vs\hbox{-} 4$	0.955 ± 0.060	0.954 ± 0.059	0.805 ± 0.117	0.837 ± 0.111	0.858 ± 0.104	0.875 ± 0.101
ecoli-0-3-4- vs -5	0.907 ± 0.109	0.906 ± 0.112	0.901 ± 0.108	0.899 ± 0.109	0.912 ± 0.104	0.912 ± 0.104
yeast-1-vs-7	0.746 ± 0.101	0.740 ± 0.107	0.500 ± 0.000	0.526 ± 0.099	0.666 ± 0.105	0.735 ± 0.108
yeast4	0.814 ± 0.066	0.816 ± 0.060	0.530 ± 0.032	0.664 ± 0.087	0.795 ± 0.079	0.820 ± 0.068
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	0.900 ± 0.080	0.905 ± 0.081	0.875 ± 0.082	0.875 ± 0.084	0.901 ± 0.075	0.904 ± 0.077
vowel0	0.996 ± 0.011	0.996 ± 0.015	0.931 ± 0.061	0.943 ± 0.048	0.982 ± 0.038	0.982 ± 0.037
ecoli-0-3-4-6- vs -5	0.898 ± 0.098	0.893 ± 0.100	0.888 ± 0.108	0.886 ± 0.112	0.909 ± 0.089	0.909 ± 0.089
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.951 ± 0.026	0.958 ± 0.024	0.504 ± 0.035	0.423 ± 0.097	0.900 ± 0.145	0.815 ± 0.201
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	0.793 ± 0.040	0.799 ± 0.039	0.607 ± 0.049	0.623 ± 0.067	0.804 ± 0.047	0.804 ± 0.043
yeast6	0.874 ± 0.078	0.871 ± 0.081	0.501 ± 0.009	0.749 ± 0.098	0.879 ± 0.078	0.877 ± 0.078
$led 7 digit\hbox{-}0\hbox{-}2\hbox{-}4\hbox{-}5\hbox{-}6\hbox{-}7\hbox{-}8\hbox{-}9\hbox{-}vs\hbox{-}1$	0.895 ± 0.070	0.894 ± 0.069	0.661 ± 0.081	0.910 ± 0.066	0.661 ± 0.085	0.857 ± 0.131
glass5	0.951 ± 0.021	0.960 ± 0.023	0.513 ± 0.058	0.352 ± 0.080	0.905 ± 0.140	0.889 ± 0.157
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.758 ± 0.165	0.907 ± 0.128	0.515 ± 0.059	0.406 ± 0.079	0.794 ± 0.193	0.687 ± 0.214
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.536 ± 0.135	0.554 ± 0.113	0.500 ± 0.000	0.497 ± 0.115	0.715 ± 0.116	0.565 ± 0.121
ecoli-0-6-7-vs-3-5	0.851 ± 0.099	0.848 ± 0.102	0.822 ± 0.102	0.819 ± 0.107	0.846 ± 0.099	0.848 ± 0.093
glass4	0.892 ± 0.111	0.890 ± 0.115	0.577 ± 0.114	0.566 ± 0.144	0.846 ± 0.156	0.845 ± 0.155
ecoli- 0 - 2 - 3 - 4 - vs - 5	0.920 ± 0.076	$0.925 \pm 0.073 \\ 3,4$	0.885 ± 0.088	0.886 ± 0.091	$0.910 \stackrel{3,4}{\pm} 0.081$	$0.909 \stackrel{3,4}{\pm} 0.080$
shuttle-c0-vs-c4	0.992 ± 0.010	0.992 ± 0.010	0.994 ± 0.009 $1,2$	0.994 ± 0.009	0.995 ± 0.008 $1,2$	0.995 ± 0.008 $1,2$
ecoli-0-6-7-vs-5	0.871 ± 0.095	0.865 ± 0.098	0.847 ± 0.099	0.845 ± 0.102	0.869 ± 0.102	0.867 ± 0.101
yeast-1-2-8-9- vs -7	0.714 ± 0.108	0.689 ± 0.106	0.500 ± 0.000	0.530 ± 0.061	0.661 ± 0.092	0.693 ± 0.103
$yeast\hbox{-} 0\hbox{-} 3\hbox{-} 5\hbox{-} 9\hbox{-} vs\hbox{-} 7\hbox{-} 8$	$0.719 \pm 0.070 \\ 3,4$	0.726 ± 0.073	0.602 ± 0.045	0.604 ± 0.041	0.708 ± 0.081 $3,4$	0.710 ± 0.076 $3,4$
yeast-2-vs-4	0.893 ± 0.049	0.892 ± 0.049	0.756 ± 0.066	0.810 ± 0.068	0.874 ± 0.066	0.881 ± 0.056
ecoli- 0 - 4 - 6 - vs - 5	0.892 ± 0.103	0.898 ± 0.091	0.900 ± 0.083	0.900 ± 0.081	0.913 ± 0.081	0.912 ± 0.082
ecoli-0-1-3-7-vs-2-6	0.848 ± 0.200	0.844 ± 0.199	0.844 ± 0.205	0.830 ± 0.206	0.843 ± 0.205	0.838 ± 0.203
shuttle- $c2$ - vs - $c4$	0.988 ± 0.069	0.988 ± 0.070	0.875 ± 0.207	0.851 ± 0.206	0.985 ± 0.059	0.980 ± 0.067
ecoli - 0 - 2 - 6 - 7 - vs - 3 - 5	0.861 ± 0.094	0.859 ± 0.095	0.812 ± 0.095	0.805 ± 0.104	0.852 ± 0.092	0.863 ± 0.087
yeast5	0.959 ± 0.035	0.964 ± 0.030	0.740 ± 0.076	0.754 ± 0.085	0.966 ± 0.033	0.956 ± 0.044
	3,4	3,4	<u> </u>	<u> </u>	1,2,3,4	3,4

Table 1: Results for BAC metric

	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
Mean rank	4.549	4.451	1.622	1.793	4.341	4.244
	3,4	3,4	_	_	3,4	3,4

Table 2: Results for mean ranks according to BAC metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
ecoli-0-1-vs-2-3-5	0.791 ± 0.144	0.775 ± 0.148	0.777 ± 0.142	0.780 ± 0.145	0.832 ± 0.130	0.821 ± 0.138
yeast-1-4-5-8-vs-7	0.138 ± 0.049	0.149 ± 0.070	0.000 ± 0.000	0.086 ± 0.087	0.149 ± 0.075	0.129 ± 0.041
glass2	0.201 ± 0.061	0.223 ± 0.108	$0.000 \stackrel{-}{\pm} 0.000$	0.169 ± 0.075	0.329 ± 0.097	$0.231 \stackrel{3.4}{\pm} 0.063$
glass-0-1-4-6-vs-2	0.179 ± 0.068	0.184 ± 0.108	0.000 ± 0.000	0.172 ± 0.069	$0.314 \stackrel{all}{\pm} 0.098$	0.208 ± 0.080
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 2$	0.172 ± 0.097	0.178 ± 0.112	0.000 ± 0.000	0.161 ± 0.085	$0.327 \stackrel{all}{\pm} 0.104$	0.209 ± 0.081
ecoli-0-1-4-7-vs-2-3-5-6	0.758 ± 0.123	0.758 ± 0.113	0.798 ± 0.110	0.797 ± 0.114	0.774 ± 0.111	0.755 ± 0.114
yeast-0-5-6-7-9-vs-4	0.452 ± 0.068	0.472 ± 0.067	0.128 ± 0.130	0.323 ± 0.110	$0.526 \stackrel{6}{\pm} 0.068$	$0.466 \stackrel{-}{\pm} 0.066$
ecoli- 0 - 1 - vs - 5	0.806 ± 0.139	0.805 ± 0.128	0.847 ± 0.125	0.744 ± 0.118	$0.855 \stackrel{all}{\pm} 0.107$	0.852 ± 0.108
yeast - 2 - vs - 8	0.455 ± 0.128	$0.493 \stackrel{4}{\pm} 0.136$	0.661 ± 0.209	0.656 ± 0.205	0.678 ± 0.190	0.674 ± 0.202
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	0.669 ± 0.057	$0.690 \stackrel{1}{\pm} 0.055$	0.777 ± 0.061	0.735 ± 0.088	0.787 ± 0.057	0.772 ± 0.061
$glass\hbox{-} 0\hbox{-} 4\hbox{-} vs\hbox{-} 5$	0.737 ± 0.150	$0.762 \stackrel{1}{\pm} 0.142$	0.393 ± 0.379	0.151 ± 0.190	0.623 ± 0.249	0.482 ± 0.269
ecoli-0-3-4-7-vs-5-6	0.816 ± 0.142	0.815 ± 0.138	0.816 ± 0.113	0.801 ± 0.117	0.820 ± 0.128	$0.806 \stackrel{4}{\pm} 0.127$
ecoli- 0 - 1 - 4 - 6 - vs - 5	0.799 ± 0.129	0.784 ± 0.148	0.838 ± 0.117	0.732 ± 0.128	0.834 ± 0.115	$0.838 \stackrel{-}{\pm} 0.117$
ecoli4	0.711 ± 0.123	$0.723 \stackrel{4}{\pm} 0.111$	0.516 ± 0.285	0.689 ± 0.168	0.820 ± 0.125	0.789 ± 0.134
$page-blocks-1\hbox{-} 3\hbox{-} vs\hbox{-} 4$	0.893 ± 0.101	$0.896 \stackrel{3}{\pm} 0.095$	0.668 ± 0.194	0.652 ± 0.206	0.753 ± 0.163	0.749 ± 0.169
ecoli-0-3-4-vs-5	$\begin{array}{c} 3,4,5,6 \\ 0.803 \pm 0.174 \end{array}$	0.799 ± 0.187	0.832 ± 0.172	0.822 ± 0.178	0.827 ± 0.164	0.823 ± 0.164
yeast-1-vs-7	0.303 ± 0.084	0.311 ± 0.088	$0.000 \stackrel{-}{\pm} 0.000$	0.123 ± 0.107	0.267 ± 0.101	0.304 ± 0.092
yeast4	0.282 ± 0.045	0.309 ± 0.045	0.104 ± 0.105	0.265 ± 0.105	0.388 ± 0.085	0.323 ± 0.059
ecoli-0-1-4-7-vs-5-6	$0.808 \stackrel{3}{\pm} 0.109$	0.818 ± 0.105	0.824 ± 0.111	0.758 ± 0.139	0.840 ± 0.106	0.838 ± 0.111
vowel0	0.977 ± 0.027	0.977 ± 0.027	0.917 ± 0.075	0.933 ± 0.057	0.970 ± 0.045	0.973 ± 0.043
ecoli-0-3-4-6- vs -5	0.817 ± 0.154	0.810 ± 0.156	0.831 ± 0.166	0.787 ± 0.178	0.825 ± 0.143	0.826 ± 0.147
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.546 ± 0.176	0.582 ± 0.180	$0.013 \stackrel{4}{\pm} 0.093$	0.015 ± 0.045	0.617 ± 0.255	0.545 ± 0.335
$yeast\hbox{-} 0\hbox{-} 2\hbox{-} 5\hbox{-} 6\hbox{-} vs\hbox{-} 3\hbox{-} 7\hbox{-} 8\hbox{-} 9$	0.493 ± 0.058	0.515 ± 0.058	0.337 ± 0.127	0.358 ± 0.146	0.605 ± 0.064	0.582 ± 0.055
yeast6	0.316 ± 0.062	0.325 ± 0.064	0.004 ± 0.031	0.438 ± 0.142	0.455 ± 0.099	0.404 ± 0.085
$led 7 digit \hbox{-} 0 \hbox{-} 2 \hbox{-} 4 \hbox{-} 5 \hbox{-} 6 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9 \hbox{-} vs \hbox{-} 1$	0.736 ± 0.106	0.731 ± 0.100	0.436 ± 0.180	0.784 ± 0.100	0.419 ± 0.176	0.673 ± 0.191
glass5	0.497 ± 0.151	0.562 ± 0.192	$0.037 \stackrel{5}{\pm} 0.146$	0.004 ± 0.025	0.566 ± 0.240	0.616 ± 0.282
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.506 ± 0.276	0.840 ± 0.210	0.040 ± 0.158	0.014 ± 0.055	0.649 ± 0.360	0.384 ± 0.296
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.183 ± 0.123	0.206 ± 0.184	0.000 ± 0.000	0.166 ± 0.067	0.314 ± 0.100	0.191 ± 0.095
ecoli-0-6-7- vs -3-5	$0.730 \stackrel{3}{\pm} 0.156$	0.735 ± 0.161	0.732 ± 0.166	0.717 ± 0.181	0.743 ± 0.175	$0.737 \stackrel{3}{\pm} 0.166$
glass4	0.536 ± 0.158	0.566 ± 0.185	0.193 ± 0.266	0.206 ± 0.255	0.548 ± 0.227	0.539 ± 0.222
ecoli-0-2-3-4-vs-5	0.834 ± 0.128	0.836 ± 0.121	0.843 ± 0.131	0.836 ± 0.145	$0.837 \stackrel{3,4}{\pm} 0.143$	0.831 ± 0.137
shuttle-c0-vs-c4	0.987 ± 0.012	0.987 ± 0.012	0.994 ± 0.009	0.994 ± 0.009	0.995 ± 0.009	0.995 ± 0.009
ecoli-0-6-7-vs-5	0.755 ± 0.161	0.743 ± 0.153	0.781 ± 0.162	0.768 ± 0.171	0.767 ± 0.162	0.753 ± 0.160
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	0.173 ± 0.060	0.174 ± 0.069	0.000 ± 0.000	0.078 ± 0.093	0.196 ± 0.088	$0.144 \stackrel{-}{\pm} 0.056$
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	0.358 ± 0.078	0.380 ± 0.083	0.323 ± 0.125	0.323 ± 0.113	0.442 ± 0.122	0.419 ± 0.107
yeast-2- vs -4	0.694 ± 0.072	0.694 ± 0.073	0.660 ± 0.127	0.649 ± 0.111	$0.759 \stackrel{all}{\pm} 0.095$	0.722 ± 0.082
ecoli-0-4-6- vs -5	$0.800 \stackrel{4}{\pm} 0.164$	$0.807 \stackrel{4}{\pm} 0.152$	0.833 ± 0.127	0.810 ± 0.134	0.837 ± 0.130	0.834 ± 0.135
ecoli-0-1-3-7-vs-2-6	0.686 ± 0.374	0.618 ± 0.364	0.697 ± 0.396	0.519 ± 0.300	0.660 ± 0.373	$0.561 \stackrel{-}{\pm} 0.346$
shuttle- $c2$ - vs - $c4$	0.956 ± 0.159	$0.946 \stackrel{4}{\pm} 0.171$	0.760 ± 0.411	0.508 ± 0.290	$0.980 \stackrel{4.6}{\pm} 0.079$	$0.958 \stackrel{-}{\pm} 0.138$
ecoli-0-2-6-7-vs-3-5	0.753 ± 0.146	$0.748 \stackrel{4}{\pm} 0.141$	$0.725 \stackrel{4}{\pm} 0.154$	0.685 ± 0.176	$0.744 \stackrel{3,4}{\pm} 0.152$	0.746 ± 0.138
yeast5	0.574 ± 0.060	0.579 ± 0.058	0.546 ± 0.118	0.549 ± 0.143	$0.663 \pm 0.074 \\ 1,2,3,4$	0.666 ± 0.082 $1,2,3,4$

Table 3: Results for F1 metric

	OSB (1) OKNORAU (2) TBAC (3) TBAW (4) OTBAC (5) OTBAW (6)							
Mean rank	3.207	3.695	2.671	2.159	5.134	4.134		
	4	1,3,4	_	_	all	1,3,4		

Table 4: Results for mean ranks according to F1 metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
ecoli-0-1-vs-2-3-5	0.780 ± 0.155	0.759 ± 0.167	0.942 ± 0.106	0.903 ± 0.149	0.935 ± 0.113	0.898 ± 0.135
yeast-1-4-5-8-vs-7	0.079 ± 0.028	0.090 ± 0.042	$0.000 \overset{1,2}{\pm} 0.000$	0.068 ± 0.072	0.093 ± 0.047	0.073 ± 0.022
glass2	0.115 ± 0.035	0.138 ± 0.074	$0.000 \stackrel{-}{\pm} 0.000$	0.097 ± 0.043	0.212 ± 0.076	0.136 ± 0.040
glass-0-1-4-6-vs-2	$0.105 \stackrel{3,4}{\pm} 0.040$	0.116 ± 0.071	0.000 ± 0.000	$0.100 \stackrel{3}{\pm} 0.040$	$0.199 \stackrel{all}{\pm} 0.067$	$0.12\overset{1,3,4}{1\pm}0.052$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 2$	$0.109 \stackrel{3}{\pm} 0.067$	0.122 ± 0.093	0.000 ± 0.000	0.094 ± 0.050	$0.211 \stackrel{all}{\pm} 0.081$	0.136 ± 0.060
ecoli-0-1-4-7-vs-2-3-5-6	0.814 ± 0.149	0.808 ± 0.138	0.960 ± 0.084	0.931 ± 0.100	0.872 ± 0.124	0.843 ± 0.147
y east - 0 - 5 - 6 - 7 - 9 - v s - 4	0.326 ± 0.062	$0.347 \stackrel{-}{\pm} 0.060$	0.517 ± 0.479	0.239 ± 0.109	0.426 ± 0.082	$0.349 \stackrel{-}{\pm} 0.065$
ecoli- 0 - 1 - vs - 5	$0.815 \stackrel{4}{\pm} 0.171$	$0.811 \stackrel{1,4}{\pm} 0.164$	0.967 ± 0.091	0.723 ± 0.145	0.914 ± 0.118	0.901 ± 0.126
yeast-2-vs-8	0.412 ± 0.203	0.461 ± 0.200	0.908 ± 0.200	0.878 ± 0.215	0.928 ± 0.152	0.895 ± 0.196
$yeast \hbox{-} 0 \hbox{-} 2 \hbox{-} 5 \hbox{-} 7 \hbox{-} 9 \hbox{-} vs \hbox{-} 3 \hbox{-} 6 \hbox{-} 8$	0.546 ± 0.079	0.573 ± 0.075	0.897 ± 0.053	0.903 ± 0.066	0.739 ± 0.074	0.714 ± 0.084
$glass\hbox{-}0\hbox{-}4\hbox{-}vs\hbox{-}5$	0.627 ± 0.195	0.637 ± 0.192	0.500 ± 0.479	0.116 ± 0.154	0.608 ± 0.307	0.453 ± 0.334
ecoli - 0 - 3 - 4 - 7 - vs - 5 - 6	0.830 ± 0.166	0.824 ± 0.166	0.870 ± 0.122	0.820 ± 0.120	0.842 ± 0.126	$0.812 \stackrel{4}{\pm} 0.135$
ecoli- 0 - 1 - 4 - 6 - vs - 5	0.843 ± 0.178	0.820 ± 0.183	0.947 ± 0.102	0.717 ± 0.164	0.884 ± 0.124	0.893 ± 0.123
ecoli4	0.606 ± 0.157	0.620 ± 0.144	0.820 ± 0.384	0.896 ± 0.190	0.788 ± 0.178	0.734 ± 0.205
$page-blocks-1\hbox{-}3\hbox{-}vs\hbox{-}4$	0.879 ± 0.125	0.891 ± 0.122	0.827 ± 0.174	0.702 ± 0.269	0.840 ± 0.181	0.787 ± 0.214
ecoli- 0 - 3 - 4 - vs - 5	0.807 ± 0.174	0.793 ± 0.196	0.882 ± 0.168 $1,2,5,6$	0.861 ± 0.182	0.842 ± 0.171	0.835 ± 0.172
yeast-1-vs-7	0.195 ± 0.056	0.206 ± 0.058	0.000 ± 0.000	0.093 ± 0.095	0.188 ± 0.069 $3,4$	0.201 ± 0.062
yeast4	0.174 ± 0.029	0.196 ± 0.031	0.380 ± 0.413	0.219 ± 0.094	0.280 ± 0.065	0.208 ± 0.042
ecoli- 0 - 1 - 4 - 7 - vs - 5 - 6	0.832 ± 0.143	0.851 ± 0.138	0.936 ± 0.106 $1,2,4$	0.770 ± 0.178	0.898 ± 0.132	0.889 ± 0.147
vowel0	0.959 ± 0.047	0.962 ± 0.044	0.991 ± 0.026	0.992 ± 0.022	0.978 ± 0.035	0.984 ± 0.028 1.2
ecoli- 0 - 3 - 4 - 6 - vs - 5	0.847 ± 0.161	0.845 ± 0.167	0.923 ± 0.146	0.805 ± 0.178	0.830 ± 0.163	0.832 ± 0.169
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.399 ± 0.196	0.436 ± 0.208	$0.020 \stackrel{all}{\pm} 0.139$	0.009 ± 0.026	0.525 ± 0.273	0.503 ± 0.349
$yeast\hbox{-}0\hbox{-}2\hbox{-}5\hbox{-}6\hbox{-}vs\hbox{-}3\hbox{-}7\hbox{-}8\hbox{-}9$	0.379 ± 0.060	0.406 ± 0.060	0.816 ± 0.163	0.727 ± 0.182 $1,2,5,6$	0.560 ± 0.063	0.516 ± 0.058 $1,2$
yeast6	0.196 ± 0.041	0.204 ± 0.043 $1,3$	$0.010 \stackrel{all}{\pm} 0.069$	0.410 ± 0.158	0.322 ± 0.083 $1,2,3,6$	0.273 ± 0.067 $1,2,3$
$led 7 digit \hbox{-} 0 \hbox{-} 2 \hbox{-} 4 \hbox{-} 5 \hbox{-} 6 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9 \hbox{-} vs \hbox{-} 1$	0.675 ± 0.117	0.670 ± 0.115	0.722 ± 0.241	$0.739 \pm 0.109 \\ 1,2,5,6$	0.593 ± 0.228	0.650 ± 0.143
glass5	0.346 ± 0.152 3.4	0.419 ± 0.218	0.050 ± 0.206	0.002 ± 0.014	0.461 ± 0.271 $1,3,4$	0.551 ± 0.323 all
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.576 ± 0.384 3,4,6	0.933 ± 0.208 all	0.060 ± 0.237	0.009 ± 0.035	0.763 ± 0.401 $1,3,4,6$	0.353 ± 0.332 $3,4$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.128 ± 0.107	0.203 ± 0.212 $1,3,4,6$	0.000 ± 0.000	0.098 ± 0.040	0.203 ± 0.079 $1,3,4,6$	0.113 ± 0.057
ecoli-0-6-7-vs-3-5	0.778 ± 0.200	0.790 ± 0.200	0.873 ± 0.164	0.841 ± 0.192 1.6	0.798 ± 0.203	0.774 ± 0.203
glass4	0.400 ± 0.143	0.443 ± 0.183 $1,3,4$	0.277 ± 0.400	0.241 ± 0.338	0.451 ± 0.218 $1,3,4$	0.438 ± 0.203 $1,3,4$
ecoli- 0 - 2 - 3 - 4 - vs - 5	0.832 ± 0.172	0.823 ± 0.164	0.958 ± 0.111 $1,2,5,6$	$0.931 \pm 0.142 \\ 1,2,5,6$	0.864 ± 0.183	0.852 ± 0.181
shuttle-c0-vs-c4	0.990 ± 0.018	0.990 ± 0.018	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000
ecoli-0-6-7-vs-5	0.794 ± 0.209	0.788 ± 0.196	0.926 ± 0.149	0.887 ± 0.175	0.802 ± 0.175	0.777 ± 0.180
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	0.101 ± 0.035	0.105 ± 0.043	0.000 ± 0.000	0.065 ± 0.083	0.131 ± 0.063	0.082 ± 0.034 $3,4$
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	0.249 ± 0.072	0.276 ± 0.077	0.780 ± 0.252	$0.726 \pm 0.272 \\ 1,2,5,6$	$0.414 \pm 0.121 \\ 1,2,6$	0.363 ± 0.106 $1,2$
yeast-2- vs -4	0.592 ± 0.080	$0.596 \stackrel{1}{\pm} 0.088$	0.953 ± 0.104	0.692 ± 0.196	0.758 ± 0.111	0.668 ± 0.111
ecoli- 0 - 4 - 6 - vs - 5	0.827 ± 0.179	0.821 ± 0.184	0.876 ± 0.145	0.828 ± 0.178	0.848 ± 0.158	0.842 ± 0.167
ecoli- 0 - 1 - 3 - 7 - vs - 2 - 6	0.723 ± 0.400	0.630 ± 0.405	0.740 ± 0.415	0.440 ± 0.270	0.677 ± 0.401	0.541 ± 0.387
shuttle-c2-vs-c4	0.943 ± 0.184	$0.930 \stackrel{4}{\pm} 0.203$	0.780 ± 0.414	0.396 ± 0.238	1.000 ± 0.000	0.966 ± 0.142
ecoli - 0 - 2 - 6 - 7 - vs - 3 - 5	0.805 ± 0.194	0.805 ± 0.184	0.905 ± 0.148	0.806 ± 0.201	0.785 ± 0.175	0.764 ± 0.172
yeast5	0.412 ± 0.057	0.415 ± 0.057	0.666 ± 0.149 all	0.615 ± 0.146 $1,2,5,6$	0.510 ± 0.081 $1,2$	0.520 ± 0.086 $1,2$

Table 5: Results for Precision metric

	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
Mean rank	2.720	3.085	4.232	3.085	4.524	3.354
	_	1	1,2,4	_	1,2,4,6	_

Table 6: Results for mean ranks according to Precision metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
ecoli-0-1-vs-2-3-5	0.829 ± 0.180	0.820 ± 0.176	0.685 ± 0.183	0.707 ± 0.172	0.771 ± 0.184	0.783 ± 0.192
yeast-1-4-5-8- vs -7	0.557 ± 0.217	0.440 ± 0.212	$0.000 \stackrel{-}{\pm} 0.000$	0.127 ± 0.135	0.393 ± 0.212	0.593 ± 0.240
glass2	0.813 ± 0.275	0.647 ± 0.297	$0.000 \stackrel{-}{\pm} 0.000$	0.683 ± 0.306	$0.785 \overset{3,4}{\pm} 0.181$	0.848 ± 0.248
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	0.650 ± 0.277	$0.495 \stackrel{3}{\pm} 0.305$	0.000 ± 0.000	0.665 ± 0.313	$0.778 \stackrel{2,3}{\pm} 0.216$	0.838 ± 0.296
glass-0-1-6-vs-2	0.522 ± 0.328	0.435 ± 0.322	0.000 ± 0.000	0.602 ± 0.317	0.792 ± 0.204	0.622 ± 0.329
ecoli-0-1-4-7-vs-2-3-5-6	0.742 ± 0.178	0.746 ± 0.172	0.705 ± 0.161	0.719 ± 0.161	$0.720 \stackrel{all}{\pm} 0.157$	0.713 ± 0.157
yeast-0-5-6-7-9-vs-4	0.762 ± 0.125	0.758 ± 0.125	$0.075 \stackrel{-}{\pm} 0.079$	0.594 ± 0.176	0.716 ± 0.116	$0.730 \stackrel{-}{\pm} 0.127$
ecoli- 0 - 1 - vs - 5	0.830 ± 0.183	0.830 ± 0.169	0.775 ± 0.182	0.795 ± 0.163	0.825 ± 0.160	$0.830 \stackrel{3.4}{\pm} 0.153$
yeast-2- vs -8	0.635 ± 0.207	0.610 ± 0.200	0.550 ± 0.229	0.550 ± 0.223	0.565 ± 0.222	0.570 ± 0.223
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	0.878 ± 0.072	0.879 ± 0.072	0.691 ± 0.088	0.633 ± 0.123	0.849 ± 0.074	0.850 ± 0.073
$glass\hbox{-}0\hbox{-}4\hbox{-}vs\hbox{-}5$	0.960 ± 0.135	$3,4,5,6$ 1.000 ± 0.000	0.350 ± 0.364	0.250 ± 0.320	0.750 ± 0.320	0.750 ± 0.335
ecoli - 0 - 3 - 4 - 7 - vs - 5 - 6	0.832 ± 0.176	0.840 ± 0.174	0.792 ± 0.159	0.800 ± 0.160	$0.820 \stackrel{3,4}{\pm} 0.170$	0.820 ± 0.166
ecoli-0-1-4-6-vs-5	0.805 ± 0.182	0.795 ± 0.191	0.775 ± 0.175	0.780 ± 0.170	0.815 ± 0.171	0.815 ± 0.171
ecoli4	0.905 ± 0.140 3.4	0.905 ± 0.131 3.4	0.395 ± 0.250	0.605 ± 0.200	0.900 ± 0.158 3.4	0.915 ± 0.146 3.4
page-blocks-1-3-vs-4	0.920 ± 0.119 3,4,5,6	0.917 ± 0.119 $3,4,5,6$	0.621 ± 0.238	0.715 ± 0.220	0.727 ± 0.209	0.769 ± 0.206
ecoli-0-3-4- vs -5	0.840 ± 0.216	0.840 ± 0.222	0.815 ± 0.211	0.815 ± 0.211	0.845 ± 0.205	0.845 ± 0.205
yeast-1-vs-7	0.693 ± 0.209 3,4,5	0.657 ± 0.222 $3,4,5$	0.000 ± 0.000	0.227 ± 0.204	0.477 ± 0.216 3.4	0.657 ± 0.231 $3,4,5$
yeast4	0.757 ± 0.140 3,4,5	0.742 ± 0.129 $3,4,5$	0.063 ± 0.065	0.377 ± 0.186	0.652 ± 0.161	0.742 ± 0.145 $3,4,5$
ecoli-0-1-4-7-vs-5-6	0.816 ± 0.164 3,4	0.824 ± 0.168 $3,4$	0.756 ± 0.166	0.772 ± 0.164	0.812 ± 0.151 3.4	0.820 ± 0.156 3.4
vowel0	0.997 ± 0.023 3,4,5,6	0.996 ± 0.031 $3,4,5,6$	0.862 ± 0.122	0.887 ± 0.097	0.966 ± 0.077 3.4	0.967 ± 0.074 3.4
ecoli- 0 - 3 - 4 - 6 - vs - 5	0.815 ± 0.192	0.805 ± 0.195	0.785 ± 0.212	0.795 ± 0.216	0.840 ± 0.171	0.840 ± 0.171
glass-0-1-6-vs-5	1.000 ± 0.000 3,4,5,6	1.000 ± 0.000 3,4,5,6	0.010 ± 0.069	0.060 ± 0.190	0.850 ± 0.287 3,4,6	0.670 ± 0.395 $3,4$
yeast-0-2-5-6-vs-3-7-8-9	0.718 ± 0.082	0.717 ± 0.077	0.219 ± 0.098	0.258 ± 0.142	0.667 ± 0.097 $3,4$	0.679 ± 0.091 3,4,5
yeast6	0.831 ± 0.160 $3,4,5$	0.820 ± 0.166 $3,4$	0.003 ± 0.020	0.517 ± 0.201	0.800 ± 0.156 3.4	0.809 ± 0.158 3,4
led7digit-0-2-4-5-6-7-8-9-vs-1	0.828 ± 0.141 $3,5$	0.828 ± 0.141 $3,5$	0.333 ± 0.165	0.848 ± 0.133	0.344 ± 0.170 -	0.749 ± 0.273 $3,5$
glass5	1.000 ± 0.000 3,4,5,6	1.000 ± 0.000 3,4,5,6	0.030 ± 0.118	0.020 ± 0.139	0.870 ± 0.279 3.4	0.820 ± 0.312 3.4
glass-0-6-vs-5	0.560 ± 0.341 $3,4$	0.820 ± 0.260	0.030 ± 0.118	0.030 ± 0.118 $-$	0.600 ± 0.374 $3,4$	0.570 ± 0.374 $3,4$
glass-0-1-5-vs-2	0.453 ± 0.322 $2,3$	0.243 ± 0.203 3	0.000 ± 0.000	0.575 ± 0.249 $2,3$	0.765 ± 0.245 $1,2,3,4$	0.675 ± 0.361 $1,2,3$
ecoli-0-6-7-vs-3-5	0.731 ± 0.198 $3,4$	0.722 ± 0.202 $3,4$	0.656 ± 0.200	0.654 ± 0.209	0.714 ± 0.187 $3,4$	0.724 ± 0.174 $3,4$
glass4	0.877 ± 0.220 3,4,5,6	0.860 ± 0.226 3,4,5,6	0.163 ± 0.232	0.227 ± 0.255 $-$	0.757 ± 0.304 3,4	0.757 ± 0.304 $3,4$
ecoli-0-2-3-4-vs-5	0.865 ± 0.151 $3,4$	0.875 ± 0.143 3.4	0.775 ± 0.175	0.780 ± 0.177	0.840 ± 0.156 3,4	0.840 ± 0.156 $3,4$
shuttle-c0-vs-c4	0.985 ± 0.021 $-$	0.985 ± 0.021 $-$	0.989 ± 0.018 -	0.989 ± 0.018 $-$	0.989 ± 0.017 -	0.989 ± 0.017
ecoli-0-6-7-vs-5	0.770 ± 0.192 $3,4$ 0.607 ± 0.220	0.760 ± 0.199 $3,4$ 0.527 ± 0.219	0.700 ± 0.193	0.700 ± 0.200	0.760 ± 0.199 3.4 0.413 ± 0.189	0.760 ± 0.199 3.4 0.613 ± 0.234
yeast-1-2-8-9-vs-7	$\begin{array}{c} 0.607 \pm 0.220 \\ 2.3,4.5 \\ 0.676 \pm 0.143 \end{array}$	0.527 ± 0.219 $3,4,5$ 0.650 ± 0.148	0.000 ± 0.000	0.110 ± 0.127 3 0.240 ± 0.120	$0.413 \pm 0.189 \\ 3.4 \\ 0.496 \pm 0.166$	$0.613 \pm 0.234 2,3,4,5 0.526 \pm 0.168$
yeast-0-3-5-9-vs-7-8	0.676 ± 0.143 all 0.853 ± 0.100	0.650 ± 0.148 $3,4,5,6$ 0.851 ± 0.104	0.210 ± 0.090	_	0.496 ± 0.166 3.4 0.778 ± 0.133	0.526 ± 0.168 3,4,5 0.809 ± 0.119
yeast-2-vs-4	$0.853 \pm 0.100 3,4,5,6 0.805 \pm 0.201$	$0.851 \pm 0.104 \\ 3,4,5,6 \\ 0.820 \pm 0.173$	0.515 ± 0.132 - 0.815 ± 0.164	0.665 ± 0.154 0.825 ± 0.160	0.778 ± 0.133 3.4 0.845 ± 0.157	0.809 ± 0.119 3,4,5 0.845 ± 0.157
ecoli-0-4-6-vs-5	_	_	_	_	_	_
ecoli-0-1-3-7-vs-2-6	0.700 ± 0.400 0.980 ± 0.139	0.700 ± 0.400 0.980 ± 0.139	0.690 ± 0.410	0.680 ± 0.409	0.700 ± 0.400 0.970 ± 0.118	0.700 ± 0.400
shuttle-c2-vs-c4	$0.980 \pm 0.139 3,4 0.749 \pm 0.191$	$0.980 \pm 0.139 \\ 3,4 \\ 0.743 \pm 0.197$	0.750 ± 0.415 0.632 ± 0.191	0.750 ± 0.415 0.630 ± 0.207	0.970 ± 0.118 3.4 0.727 ± 0.179	0.970 ± 0.118 0.755 ± 0.171
ecoli-0-2-6-7-vs-3-5	3,4	3,4	_	_	3,4	3,4
yeast5	$\begin{array}{c c} 0.962 \pm 0.072 \\ 3,4 \end{array}$	$0.971 \pm 0.062 \\ 3,4,6$	0.489 ± 0.153 $-$	$\begin{array}{c c} 0.518 \pm 0.171 \\ - \end{array}$	$0.962 \pm 0.065 \\ 3,4,6$	0.939 ± 0.087 3,4

Table 7: Results for Recall metric

	OSB (1) OKNORAU (2) TBAC (3) TBAW (4) OTBAC (5) OTBAW (6)							
Mean rank	4.854	4.476	1.293	2.171	3.756	4.451		
	2,3,4,5	3,4	_	3	3,4	3,4,5		

Table 8: Results for mean ranks according to Recall metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
ecoli-0-1-vs-2-3-5	0.900 ± 0.090	0.894 ± 0.090	0.840 ± 0.091	0.849 ± 0.088	0.882 ± 0.091	0.886 ± 0.096
yeast-1-4-5-8-vs-7	0.633 ± 0.105	0.619 ± 0.106	$0.500 \stackrel{-}{\pm} 0.000$	0.530 ± 0.061	0.609 ± 0.104	0.628 ± 0.102
glass2	0.651 ± 0.096	0.652 ± 0.132	0.500 ± 0.000	0.575 ± 0.138	$0.758 \overset{3,4}{\pm} 0.102$	0.683 ± 0.097
glass-0-1-4-6-vs-2	0.580 ± 0.122	0.579 ± 0.141	0.500 ± 0.000	0.574 ± 0.137	$0.743 \stackrel{all}{\pm} 0.108$	$0.645\overset{3,4}{\pm}0.095$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 2$	0.556 ± 0.120	0.572 ± 0.126	0.500 ± 0.000	0.526 ± 0.140	0.744 ± 0.103	0.610 ± 0.090
ecoli-0-1-4-7-vs-2-3-5-6	0.861 ± 0.087	0.863 ± 0.084	0.851 ± 0.079	0.856 ± 0.080	0.854 ± 0.077	0.848 ± 0.077
yeast-0-5-6-7-9-vs-4	0.793 ± 0.058	0.800 ± 0.059	$0.536 \stackrel{6}{\pm} 0.040$	0.671 ± 0.088	$0.803 \stackrel{6}{\pm} 0.051$	$0.789 \stackrel{-}{\pm} 0.057$
ecoli-0-1-vs-5	0.905 ± 0.091	0.905 ± 0.085	0.886 ± 0.091	0.882 ± 0.081	0.908 ± 0.079	$0.910 \stackrel{3,4}{\pm} 0.076$
yeast-2-vs-8	$0.790 \stackrel{4}{\pm} 0.094$	$0.785 \stackrel{4}{\pm} 0.096$	0.774 ± 0.114	0.773 ± 0.112	0.781 ± 0.111	0.783 ± 0.113
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	$0.897 \stackrel{2}{\pm} 0.033$	0.902 ± 0.034	0.841 ± 0.043	0.813 ± 0.060	0.907 ± 0.037	$0.905 \stackrel{-}{\pm} 0.036$
glass-0-4-vs-5	0.944 ± 0.068	0.964 ± 0.024	$0.668 \stackrel{4}{\pm} 0.184$	0.538 ± 0.157	0.841 ± 0.158	0.757 ± 0.175
ecoli-0-3-4-7-vs-5-6	0.905 ± 0.088	0.908 ± 0.086	$0.889 \stackrel{4}{\pm} 0.079$	0.890 ± 0.080	0.901 ± 0.086	$0.899 \stackrel{4}{\pm} 0.084$
ecoli-0-1-4-6-vs-5	0.894 ± 0.089	0.888 ± 0.095	0.885 ± 0.087	0.876 ± 0.085	0.903 ± 0.085	0.903 ± 0.085
ecoli4	$0.931 \stackrel{4}{\pm} 0.070$	$0.932 \stackrel{4}{\pm} 0.065$	$0.698 \stackrel{4}{\pm} 0.125$	0.798 ± 0.099	0.940 ± 0.077	0.943 ± 0.070
$page-blocks-1\hbox{-} 3\hbox{-} vs\hbox{-} 4$	0.955 ± 0.060	0.954 ± 0.059	0.805 ± 0.117	0.837 ± 0.111	0.858 ± 0.104	$0.875 \stackrel{all}{\pm} 0.101$
ecoli-0-3-4-vs-5	0.907 ± 0.109	0.906 ± 0.112	0.901 ± 0.108	0.899 ± 0.109	0.912 ± 0.104	0.912 ± 0.104
yeast-1-vs-7	0.746 ± 0.101	0.740 ± 0.107	0.500 ± 0.000	0.526 ± 0.099	0.666 ± 0.105	0.735 ± 0.108
yeast4	0.814 ± 0.066	0.816 ± 0.060	0.530 ± 0.032	0.664 ± 0.087	0.795 ± 0.079	0.820 ± 0.068
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	$0.900 \stackrel{3,4}{\pm} 0.080$	0.905 ± 0.081	0.875 ± 0.082	0.875 ± 0.084	0.901 ± 0.075	0.904 ± 0.077
vowel0	0.996 ± 0.011	$0.996 \stackrel{4}{\pm} 0.015$	$0.931 \stackrel{4}{\pm} 0.061$	0.943 ± 0.048	0.982 ± 0.038	0.982 ± 0.037
ecoli-0-3-4-6-vs-5	0.898 ± 0.098	0.893 ± 0.100	0.888 ± 0.108	0.886 ± 0.112	0.909 ± 0.089	0.909 ± 0.089
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.951 ± 0.026	0.958 ± 0.024	$0.504 \stackrel{4}{\pm} 0.035$	0.423 ± 0.097	0.900 ± 0.145	$0.815\stackrel{-}{\pm} 0.201$
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	0.793 ± 0.040	0.799 ± 0.039	$0.607 \stackrel{4}{\pm} 0.049$	0.623 ± 0.067	0.804 ± 0.047	0.804 ± 0.043
yeast6	0.874 ± 0.078	0.871 ± 0.081	0.501 ± 0.009	0.749 ± 0.098	0.879 ± 0.078	0.877 ± 0.078
$led 7 digit \hbox{-} 0 \hbox{-} 2 \hbox{-} 4 \hbox{-} 5 \hbox{-} 6 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9 \hbox{-} vs \hbox{-} 1$	0.895 ± 0.070	0.894 ± 0.069	0.661 ± 0.081	0.910 ± 0.066	0.661 ± 0.085	0.857 ± 0.131
glass5	0.951 ± 0.021	0.960 ± 0.023	0.513 ± 0.058	0.352 ± 0.080	0.905 ± 0.140	0.889 ± 0.157
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.758 ± 0.165	0.907 ± 0.128	$0.515 \stackrel{4}{\pm} 0.059$	0.406 ± 0.079	0.794 ± 0.193	0.687 ± 0.214
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.536 ± 0.135	0.554 ± 0.113	$0.500 \stackrel{4}{\pm} 0.000$	0.497 ± 0.115	0.715 ± 0.116	0.565 ± 0.121
ecoli-0-6-7- vs -3-5	0.851 ± 0.099	0.848 ± 0.102	0.822 ± 0.102	0.819 ± 0.107	0.846 ± 0.099	0.848 ± 0.093
glass4	0.892 ± 0.111	$0.890 \stackrel{4}{\pm} 0.115$	0.577 ± 0.114	0.566 ± 0.144	0.846 ± 0.156	0.845 ± 0.155
ecoli-0-2-3-4-vs-5	0.920 ± 0.076	0.925 ± 0.073	0.885 ± 0.088	0.886 ± 0.091	0.910 ± 0.081	$0.909 \stackrel{3,4}{\pm} 0.080$
shuttle-c0-vs-c4	0.992 ± 0.010	0.992 ± 0.010	0.994 ± 0.009	0.994 ± 0.009	0.995 ± 0.008	0.995 ± 0.008
ecoli-0-6-7- vs -5	0.871 ± 0.095	0.865 ± 0.098	0.847 ± 0.099	0.845 ± 0.102	0.869 ± 0.102	0.867 ± 0.101
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	0.714 ± 0.108	0.689 ± 0.106	0.500 ± 0.000	0.530 ± 0.061	0.661 ± 0.092	0.693 ± 0.103
$yeast\hbox{-} 0\hbox{-} 3\hbox{-} 5\hbox{-} 9\hbox{-} vs\hbox{-} 7\hbox{-} 8$	0.719 ± 0.070	0.726 ± 0.073	0.602 ± 0.045	$0.604 \stackrel{3}{\pm} 0.041$	0.708 ± 0.081	0.710 ± 0.076
yeast-2- vs -4	0.893 ± 0.049	0.892 ± 0.049	0.756 ± 0.066	0.810 ± 0.068	0.874 ± 0.066	0.881 ± 0.056
ecoli-0-4-6- vs -5	0.892 ± 0.103	0.898 ± 0.091	0.900 ± 0.083	$0.900 \stackrel{3}{\pm} 0.081$	0.913 ± 0.081	0.912 ± 0.082
ecoli - 0 - 1 - 3 - 7 - vs - 2 - 6	0.848 ± 0.200	0.844 ± 0.199	0.844 ± 0.205	0.830 ± 0.206	0.843 ± 0.205	$0.838 \stackrel{-}{\pm} 0.203$
shuttle-c2-vs-c4	0.988 ± 0.069	0.988 ± 0.070	0.875 ± 0.207	0.851 ± 0.206	0.985 ± 0.059	0.980 ± 0.067
ecoli - 0 - 2 - 6 - 7 - vs - 3 - 5	0.861 ± 0.094	0.859 ± 0.095	0.812 ± 0.095	0.805 ± 0.104	0.852 ± 0.092	0.863 ± 0.087
yeast5	0.959 ± 0.035	0.964 ± 0.030	$0.740 \stackrel{4}{\pm} 0.076$	0.754 ± 0.085	0.966 ± 0.033	0.956 ± 0.044
	3,4	3,4	l –	l –	1,2,3,4	3,4

Table 9: Results for AUC metric

	OSB (1) OKNORAU (2) TBAC (3) TBAW (4) OTBAC (5) OTBAW (6)							
Mean rank	4.549	4.451	1.622	1.793	4.341	4.244		
	3,4	3,4	_	_	3,4	3,4		

Table 10: Results for mean ranks according to AUC metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
ecoli-0-1-vs-2-3-5	0.891 ± 0.108	0.884 ± 0.107	0.817 ± 0.116	0.830 ± 0.108	0.868 ± 0.110	0.872 ± 0.114
yeast-1-4-5-8-vs-7	0.613 ± 0.126	0.570 ± 0.160	$0.000 \stackrel{-}{\pm} 0.000$	0.250 ± 0.231	0.536 ± 0.189	0.607 ± 0.116
glass2	0.587 ± 0.162	0.594 ± 0.236	$0.000 \stackrel{-}{\pm} 0.000$	0.522 ± 0.182	0.752 ± 0.103	0.625 ± 0.142
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	0.542 ± 0.149	0.503 ± 0.254	0.000 ± 0.000	0.529 ± 0.158	$0.726 \stackrel{all}{\pm} 0.144$	0.549 ± 0.182
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 2$	0.469 ± 0.212	0.462 ± 0.253	0.000 ± 0.000	0.470 ± 0.186	$0.732 \stackrel{all}{\pm} 0.106$	0.529 ± 0.165
ecoli-0-1-4-7-vs-2-3-5-6	0.846 ± 0.104	0.849 ± 0.099	0.832 ± 0.098	0.839 ± 0.097	$0.838 \stackrel{all}{\pm} 0.094$	0.832 ± 0.094
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	0.789 ± 0.062	0.796 ± 0.063	$0.200 \stackrel{6}{\pm} 0.185$	0.651 ± 0.097	$0.795 \stackrel{6}{\pm} 0.058$	0.783 ± 0.062
ecoli- 0 - 1 - vs - 5	0.895 ± 0.108	0.896 ± 0.095	0.873 ± 0.105	$0.873 \stackrel{3}{\pm} 0.091$	0.900 ± 0.090	0.902 ± 0.086
yeast-2-vs-8	0.762 ± 0.125	0.753 ± 0.126	0.718 ± 0.181	0.719 ± 0.177	0.735 ± 0.153	0.738 ± 0.155
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	0.896 ± 0.035	0.901 ± 0.035	0.826 ± 0.053	0.788 ± 0.078	0.905 ± 0.040	0.903 ± 0.039
$glass\hbox{-} 0\hbox{-} 4\hbox{-} vs\hbox{-} 5$	0.940 ± 0.077	0.963 ± 0.026	0.427 ± 0.405	0.285 ± 0.343	0.790 ± 0.265	0.662 ± 0.303
ecoli - 0 - 3 - 4 - 7 - vs - 5 - 6	0.896 ± 0.101	0.900 ± 0.099	0.878 ± 0.092	0.880 ± 0.092	0.892 ± 0.099	0.890 ± 0.095
ecoli- 0 - 1 - 4 - 6 - vs - 5	0.883 ± 0.103	0.876 ± 0.113	0.873 ± 0.101	0.865 ± 0.097	0.893 ± 0.097	0.893 ± 0.097
ecoli4	0.927 ± 0.076	0.929 ± 0.070	0.558 ± 0.288	0.763 ± 0.133	0.935 ± 0.087	0.939 ± 0.079
page-blocks-1-3-vs-4	0.953 ± 0.065	0.951 ± 0.065	0.765 ± 0.170	0.814 ± 0.143	0.837 ± 0.132	0.859 ± 0.127
ecoli-0-3-4-vs-5	0.894 ± 0.134	0.888 ± 0.168	0.887 ± 0.130	0.886 ± 0.130	$0.901 \stackrel{3}{\pm} 0.125$	0.901 ± 0.125
yeast-1-vs-7	0.733 ± 0.117 $3,4,5$	0.723 ± 0.125 $3,4,5$	0.000 ± 0.000	0.343 ± 0.253	0.617 ± 0.158 3.4	0.716 ± 0.130 3,4,5
yeast4	0.808 ± 0.074 $3,4,5$	0.809 ± 0.068 $3,4,5$	0.182 ± 0.172	0.569 ± 0.177	0.776 ± 0.099 $3,4$	0.811 ± 0.078 $3,4,5$
ecoli- 0 - 1 - 4 - 7 - vs - 5 - 6	0.891 ± 0.091	0.896 ± 0.092	0.862 ± 0.095	0.864 ± 0.095	0.893 ± 0.084	0.896 ± 0.086
vowel0	0.996 ± 0.012 3.4	$0.996 \stackrel{4}{\pm} 0.016$	0.926 ± 0.068	0.940 ± 0.053	0.981 ± 0.041 3.4	0.982 ± 0.039
ecoli- 0 - 3 - 4 - 6 - vs - 5	0.888 ± 0.112	0.882 ± 0.114	0.873 ± 0.128	0.873 ± 0.131	0.902 ± 0.099	0.902 ± 0.100
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.950 ± 0.027 3,4,6	0.957 ± 0.026	0.014 ± 0.098	0.063 ± 0.193	0.865 ± 0.244 $3,4$	0.710 ± 0.375 3.4
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	0.788 ± 0.044	0.794 ± 0.043	0.454 ± 0.108	0.484 ± 0.137	0.790 ± 0.058	0.792 ± 0.052
yeast6	0.867 ± 0.091 $2,3,4$	0.863 ± 0.094 $3,4$	0.008 ± 0.052	0.692 ± 0.165	$0.870 \pm 0.092 \\ 2,3,4,6$	0.869 ± 0.092 $1,2,3,4$
led 7 digit - 0 - 2 - 4 - 5 - 6 - 7 - 8 - 9 - vs - 1	0.889 ± 0.078 $3,5$	0.888 ± 0.077 $3,5$	0.547 ± 0.171	0.904 ± 0.075	0.553 ± 0.174	0.824 ± 0.202 3.5
glass5	0.950 ± 0.022	0.959 ± 0.024 $1,3,4$	0.042 ± 0.167	0.015 ± 0.104	0.872 ± 0.240 $3,4,6$	0.843 ± 0.273 3.4
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.651 ± 0.326 $3,4$	0.883 ± 0.184	0.042 ± 0.167	0.036 ± 0.142	0.681 ± 0.364 $1,3,4,6$	0.575 ± 0.345 $3,4$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.436 ± 0.232	0.366 ± 0.274	0.000 ± 0.000	0.463 ± 0.117	0.693 ± 0.146	0.445 ± 0.216 $2,3$
ecoli-0- 6 - 7 - vs - 3 - 5	0.833 ± 0.123 ₄	0.829 ± 0.126	0.796 ± 0.127	0.791 ± 0.135	0.828 ± 0.118	0.833 ± 0.107
glass4	0.882 ± 0.129 $2,3,4$	0.880 ± 0.134 $3,4$	0.238 ± 0.322	0.317 ± 0.329	0.805 ± 0.247 $3,4$	0.804 ± 0.246 $3,4$
ecoli-0-2-3-4- vs -5	0.915 ± 0.084	0.920 ± 0.079	0.872 ± 0.105	0.873 ± 0.108	0.903 ± 0.090	0.902 ± 0.089
shuttle-c0-vs-c4	0.992 ± 0.010	0.992 ± 0.010	0.994 ± 0.009	0.994 ± 0.009	0.995 ± 0.009	0.995 ± 0.009
ecoli-0- 6 - 7 - vs - 5	0.856 ± 0.117	0.850 ± 0.120	0.825 ± 0.122	0.823 ± 0.126	0.855 ± 0.121	0.853 ± 0.120
yeast-1-2-8-9- vs -7	0.692 ± 0.134 $3.4.5.6$	0.649 ± 0.162 $3.4.5$	0.000 ± 0.000	0.228 ± 0.227	0.587 ± 0.171 3.4	0.661 ± 0.169 $3.4.5$
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	0.712 ± 0.076 $3.4.5$	0.715 ± 0.082 $3.4.5.6$	0.439 ± 0.126	0.460 ± 0.112	0.660 ± 0.138 3.4	0.670 ± 0.134 3.4
yeast-2- vs -4	0.890 ± 0.052 $3,4,5,6$	$\begin{array}{c} 3,4,5,6\\ 0.889 \pm 0.053\\ 3,4,5 \end{array}$	0.709 ± 0.101	0.790 ± 0.086	$0.865 \pm 0.075 \\ 3.4$	0.875 ± 0.063 $3,4$
ecoli- 0 - 4 - 6 - vs - 5	0.879 ± 0.121	0.889 ± 0.101	0.891 ± 0.094	0.892 ± 0.091	0.906 ± 0.090	0.906 ± 0.090
ecoli-0-1-3-7-vs-2-6	0.740 ± 0.386	0.737 ± 0.384	0.727 ± 0.400	0.715 ± 0.395	0.739 ± 0.386	0.734 ± 0.383
shuttle- $c2$ - vs - $c4$	0.978 ± 0.139	0.978 ± 0.139	0.762 ± 0.410	0.742 ± 0.400	0.982 ± 0.069	0.977 ± 0.077
ecoli- 0 - 2 - 6 - 7 - vs - 3 - 5	0.846 ± 0.113 $3,4$	0.842 ± 0.115 $3,4$	0.782 ± 0.123	0.774 ± 0.136	0.836 ± 0.110 $3,4$	0.851 ± 0.099 $3,4$
yeast5	$0.959 \pm 0.036 \\ 3,4$	$0.963 \pm 0.031 \\ 3,4$	0.687 ± 0.109	0.706 ± 0.121	0.966 ± 0.034 $1,2,3,4$	$0.954 \pm 0.047 \\ 3,4$

Table 11: Results for GMEAN metric

	OSB (1) OKNORAU (2) TBAC (3) TBAW (4) OTBAC (5) OTBAW (6)							
Mean rank	4.476	4.354	1.427	2.085	4.354	4.305		
	3,4	3,4	_	3	3,4	3,4		

Table 12: Results for mean ranks according to GMEAN metric