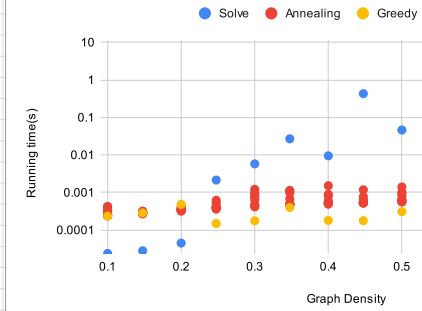
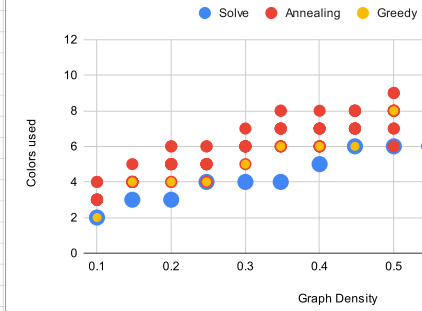


Input	Vertices	Edges	Density	Solve Time	Annealing Time	Greedy Time	Colors	Annealing Colors	Greedy Colors
test_cases/21-2.txt	21	21	0.1		0.000426849			3	
test_cases/21-2.txt	21	21	0.1		0.000303799			3	
test_cases/21-2.txt	21	21	0.1		0.000318344			3	
test_cases/21-2.txt	21	21	0.1		0.000242103			3	
test_cases/21-2.txt	21	21	0.1		0.000246237			4	
test_cases/21-2.txt	21	21	0.1		0.000419592			3	
test_cases/21-2.txt	21	21	0.1		0.000372809			3	
test_cases/21-2.txt	21	21	0.1		0.000252835			3	
test_cases/21-2.txt	21	21	0.1		0.000245886			4	
test_cases/21-2.txt	21	21	0.1		0.000239675			3	
test_cases/21-2.txt	21	21	0.1	2.39E-05		0.000235525	2		2
test_cases/21-3.txt	21	31	0.1476190476		0.000298173			4	
test_cases/21-3.txt	21	31	0.1476190476		0.000280667			4	
test_cases/21-3.txt	21	31	0.1476190476		0.000269725			4	
test_cases/21-3.txt	21	31	0.1476190476		0.000321516			5	
test_cases/21-3.txt	21	31	0.1476190476		0.000309799			4	
test_cases/21-3.txt	21	31	0.1476190476		0.000282304			4	
test_cases/21-3.txt	21	31	0.1476190476		0.00027976			4	
test_cases/21-3.txt	21	31	0.1476190476		0.000278117			4	
test_cases/21-3.txt	21	31	0.1476190476		0.00029126			4	
test_cases/21-3.txt	21	31	0.1476190476		0.00028845			4	
test_cases/21-3.txt	21	31	0.1476190476			0.000287668			4
test_cases/21-3.txt	21	31	0.1476190476	2.82E-05			3		
test_cases/21-4.txt	21	42	0.2		0.000365119			6	
test_cases/21-4.txt	21	42	0.2		0.000320271			5	
test_cases/21-4.txt	21	42	0.2		0.000348582			5	
test_cases/21-4.txt	21	42	0.2		0.000361418			5	
test_cases/21-4.txt	21	42	0.2		0.000377611			5	
test_cases/21-4.txt	21	42	0.2		0.000334995			6	
test_cases/21-4.txt	21	42	0.2		0.000436885			5	
test_cases/21-4.txt	21	42	0.2		0.000359656			5	
test_cases/21-4.txt	21	42	0.2		0.000332606			4	
test_cases/21-4.txt	21	42	0.2		0.000332007			4	
test_cases/21-4.txt	21	42	0.2			0.000484987			4
test_cases/21-4.txt	21	42	0.2	4.53E-05			3		
test_cases/21-5.txt	21	52	0.2476190476		0.00039735			5	
test_cases/21-5.txt	21	52	0.2476190476		0.00042509			5	
test_cases/21-5.txt	21	52	0.2476190476		0.000386131			5	
test_cases/21-5.txt	21	52	0.2476190476		0.000374515			5	
test_cases/21-5.txt	21	52	0.2476190476		0.000390443			6	
test_cases/21-5.txt	21	52	0.2476190476		0.000408182			5	
test_cases/21-5.txt	21	52	0.2476190476		0.000402006			4	
test_cases/21-5.txt	21	52	0.2476190476		0.000362865			5	
test_cases/21-5.txt	21	52	0.2476190476		0.000622733			6	
test_cases/21-5.txt	21	52	0.2476190476		0.000537702			4	
test_cases/21-5.txt	21	52	0.2476190476	0.002155981		0.000150025	4		4
test_cases/21-6.txt	21	63	0.3		0.000779251			6	
test_cases/21-6.txt	21	63	0.3		0.000416762			6	
test_cases/21-6.txt	21	63	0.3		0.000911274			6	
test_cases/21-6.txt	21	63	0.3		0.001223826			6	
test_cases/21-6.txt	21	63	0.3		0.000466732			7	
test_cases/21-6.txt	21	63	0.3		0.000641647			6	
test_cases/21-6.txt	21	63	0.3		0.000972707			6	
test_cases/21-6.txt	21	63	0.3		0.000445662			6	
test_cases/21-6.txt	21	63	0.3		0.000749602			5	
test_cases/21-6.txt	21	63	0.3		0.000473321			6	
test_cases/21-6.txt	21	63	0.3			0.000176757			5
test_cases/21-6.txt	21	63	0.3	0.005823564			4		
test_cases/21-7.txt	21	73	0.3476190476		0.000472942			7	
test_cases/21-7.txt	21	73	0.3476190476		0.00048302			6	

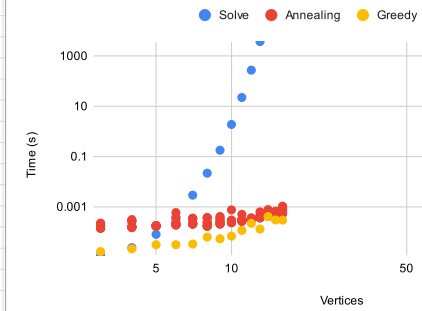
Runtime on 21 vertex graph



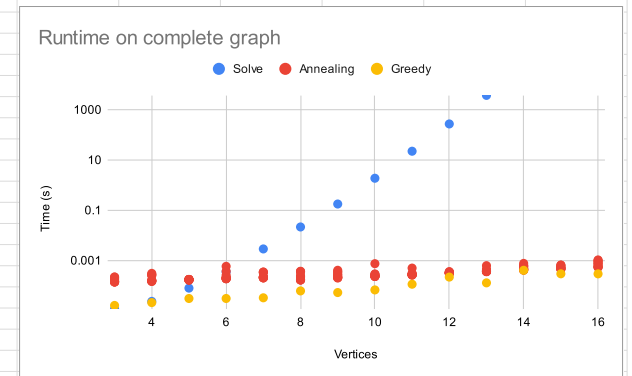
Correctness on 21 vertex graph



Runtime on complete graph



test_cases/21-7.txt	21	73	0.3476190476		0.000675019			6
test_cases/21-7.txt	21	73	0.3476190476		0.000488381			7
test_cases/21-7.txt	21	73	0.3476190476		0.001103288			7
test_cases/21-7.txt	21	73	0.3476190476		0.001145189			8
test_cases/21-7.txt	21	73	0.3476190476		0.000989141			8
test_cases/21-7.txt	21	73	0.3476190476		0.000492332			6
test_cases/21-7.txt	21	73	0.3476190476		0.000466675			7
test_cases/21-7.txt	21	73	0.3476190476		0.000485079			6
test_cases/21-7.txt	21	73	0.3476190476			0.000401785		6
test_cases/21-7.txt	21	73	0.3476190476	0.027024955			4	
test_cases/21-8.txt	21	84	0.4		0.000501341			7
test_cases/21-8.txt	21	84	0.4		0.000532543			6
test_cases/21-8.txt	21	84	0.4		0.000815357			8
test_cases/21-8.txt	21	84	0.4		0.000535251			7
test_cases/21-8.txt	21	84	0.4		0.000496948			6
test_cases/21-8.txt	21	84	0.4		0.000598212			6
test_cases/21-8.txt	21	84	0.4		0.00053625			7
test_cases/21-8.txt	21	84	0.4		0.001529958			6
test_cases/21-8.txt	21	84	0.4		0.000500577			7
test_cases/21-8.txt	21	84	0.4		0.000902162			6
test_cases/21-8.txt	21	84	0.4			0.000181404		6
test_cases/21-8.txt	21	84	0.4	0.009534646			5	
test_cases/21-9.txt	21	94	0.4476190476		0.000780442			8
test_cases/21-9.txt	21	94	0.4476190476		0.000562866			7
test_cases/21-9.txt	21	94	0.4476190476		0.00054844			7
test_cases/21-9.txt	21	94	0.4476190476		0.000531623			7
test_cases/21-9.txt	21	94	0.4476190476		0.000529431			8
test_cases/21-9.txt	21	94	0.4476190476		0.00053109			7
test_cases/21-9.txt	21	94	0.4476190476		0.000537396			8
test_cases/21-9.txt	21	94	0.4476190476		0.000647705			8
test_cases/21-9.txt	21	94	0.4476190476		0.000530531			8
test_cases/21-9.txt	21	94	0.4476190476		0.001184668			7
test_cases/21-9.txt	21	94	0.4476190476			0.00017856		6
test_cases/21-9.txt	21	94	0.4476190476	0.431597217			6	
test_cases/21-10.txt	21	105	0.5		0.000832298			9
test_cases/21-10.txt	21	105	0.5		0.000998877			9
test_cases/21-10.txt	21	105	0.5		0.000570247			7
test_cases/21-10.txt	21	105	0.5		0.000650437			7
test_cases/21-10.txt	21	105	0.5		0.000566758			8
test_cases/21-10.txt	21	105	0.5		0.000661955			8
test_cases/21-10.txt	21	105	0.5		0.0005829			8
test_cases/21-10.txt	21	105	0.5		0.000962513			6
test_cases/21-10.txt	21	105	0.5		0.000599443			8
test_cases/21-10.txt	21	105	0.5		0.001408809			8
test_cases/21-10.txt	21	105	0.5			0.000311483		8
test_cases/21-10.txt	21	105	0.5	0.046356912			6	
test_cases/21-11.txt	21	115	0.5476190476		0.000630296			8
test_cases/21-11.txt	21	115	0.5476190476		0.000635997			8
test_cases/21-11.txt	21	115	0.5476190476		0.000801688			8
test_cases/21-11.txt	21	115	0.5476190476		0.000625833			9
test_cases/21-11.txt	21	115	0.5476190476		0.000640635			8
test_cases/21-11.txt	21	115	0.5476190476		0.000587371			8
test_cases/21-11.txt	21	115	0.5476190476		0.000626811			9
test_cases/21-11.txt	21	115	0.5476190476		0.000598641			8
test_cases/21-11.txt	21	115	0.5476190476		0.000633968			8
test_cases/21-11.txt	21	115	0.5476190476		0.000601882			8
test_cases/21-11.txt	21	115	0.5476190476			0.000913959		7
test_cases/21-11.txt	21	115	0.5476190476	0.064019282			6	
test_cases/21-12.txt	21	126	0.6		0.000705576			11
test_cases/21-12.txt	21	126	0.6		0.000683487			8
test_cases/21-12.txt	21	126	0.6		0.000715645			10
test_cases/21-12.txt	21	126	0.6		0.000737639			9
test_cases/21-12.txt	21	126	0.6		0.000679231			10



[illegible]

test_cases/k-3.txt	3	3	1		0.000145435		3
test_cases/k-3.txt	3	3	1		0.0002219		3
test_cases/k-3.txt	3	3	1			1.63E-05	3
test_cases/k-3.txt	3	3	1	1.18E-05			3
test_cases/k-4.txt	4	6	1		0.000284201		4
test_cases/k-4.txt	4	6	1		0.000149015		4
test_cases/k-4.txt	4	6	1		0.000258427		4
test_cases/k-4.txt	4	6	1		0.000308149		4
test_cases/k-4.txt	4	6	1		0.000158238		4
test_cases/k-4.txt	4	6	1		0.000166498		4
test_cases/k-4.txt	4	6	1		0.000256919		4
test_cases/k-4.txt	4	6	1		0.000157447		4
test_cases/k-4.txt	4	6	1		0.000147242		4
test_cases/k-4.txt	4	6	1		0.000153019		4
test_cases/k-4.txt	4	6	1			2.11E-05	4
test_cases/k-4.txt	4	6	1	2.36E-05			4
test_cases/k-5.txt	5	10	1		0.000166519		5
test_cases/k-5.txt	5	10	1		0.000172165		5
test_cases/k-5.txt	5	10	1		0.000176451		5
test_cases/k-5.txt	5	10	1		0.000176052		5
test_cases/k-5.txt	5	10	1		0.000173953		5
test_cases/k-5.txt	5	10	1		0.000171702		5
test_cases/k-5.txt	5	10	1		0.000165632		5
test_cases/k-5.txt	5	10	1		0.000171308		5
test_cases/k-5.txt	5	10	1		0.00017437		5
test_cases/k-5.txt	5	10	1		0.000174988		5
test_cases/k-5.txt	5	10	1			3.08E-05	5
test_cases/k-5.txt	5	10	1	7.97E-05			5
test_cases/k-6.txt	6	15	1		0.000207182		6
test_cases/k-6.txt	6	15	1		0.000259686		6
test_cases/k-6.txt	6	15	1		0.000187196		6
test_cases/k-6.txt	6	15	1		0.000212557		6
test_cases/k-6.txt	6	15	1		0.000190274		6
test_cases/k-6.txt	6	15	1		0.000190645		6
test_cases/k-6.txt	6	15	1		0.00019699		6
test_cases/k-6.txt	6	15	1		0.000192548		6
test_cases/k-6.txt	6	15	1		0.000374022		6
test_cases/k-6.txt	6	15	1		0.000586099		6
test_cases/k-6.txt	6	15	1			3.08E-05	6
test_cases/k-6.txt	6	15	1	0.00035477			6
test_cases/k-7.txt	7	21	1		0.000218993		7
test_cases/k-7.txt	7	21	1		0.000332579		7
test_cases/k-7.txt	7	21	1		0.000343324		7
test_cases/k-7.txt	7	21	1		0.000203037		7
test_cases/k-7.txt	7	21	1		0.000217968		7
test_cases/k-7.txt	7	21	1		0.00020709		7
test_cases/k-7.txt	7	21	1		0.00020472		7
test_cases/k-7.txt	7	21	1		0.000208415		7
test_cases/k-7.txt	7	21	1		0.000220464		7
test_cases/k-7.txt	7	21	1		0.000348721		7
test_cases/k-7.txt	7	21	1			3.28E-05	7
test_cases/k-7.txt	7	21	1	0.002890436			7
test_cases/k-8.txt	8	28	1		0.000175677		8
test_cases/k-8.txt	8	28	1		0.000245673		8
test_cases/k-8.txt	8	28	1		0.000230108		8
test_cases/k-8.txt	8	28	1		0.000168011		8
test_cases/k-8.txt	8	28	1		0.000167174		8
test_cases/k-8.txt	8	28	1		0.000217231		8
test_cases/k-8.txt	8	28	1		0.000373277		8
test_cases/k-8.txt	8	28	1		0.000360102		8
test_cases/k-8.txt	8	28	1		0.000358463		8
test_cases/k-8.txt	8	28	1		0.000169068		8
test_cases/k-8.txt	8	28	1			6.17E-05	8

test_cases/k-8.txt	8	28	1	0.021643619		8
test_cases/k-9.txt	9	36	1	0.000210464		9
test_cases/k-9.txt	9	36	1	0.000280999		9
test_cases/k-9.txt	9	36	1	0.000229667		9
test_cases/k-9.txt	9	36	1	0.000210665		9
test_cases/k-9.txt	9	36	1	0.000200864		9
test_cases/k-9.txt	9	36	1	0.000334692		9
test_cases/k-9.txt	9	36	1	0.000264011		9
test_cases/k-9.txt	9	36	1	0.000212777		9
test_cases/k-9.txt	9	36	1	0.000362783		9
test_cases/k-9.txt	9	36	1	0.00040881	5.31E-05	9
test_cases/k-9.txt	9	36	1	0.177256125		9
test_cases/k-10.txt	10	45	1	0.00074864		10
test_cases/k-10.txt	10	45	1	0.000235633		10
test_cases/k-10.txt	10	45	1	0.000282669		10
test_cases/k-10.txt	10	45	1	0.000292351		10
test_cases/k-10.txt	10	45	1	0.000235485		10
test_cases/k-10.txt	10	45	1	0.000247016		10
test_cases/k-10.txt	10	45	1	0.000231011		10
test_cases/k-10.txt	10	45	1	0.000264932		10
test_cases/k-10.txt	10	45	1	0.000235144		10
test_cases/k-10.txt	10	45	1	0.000239239		10
test_cases/k-10.txt	10	45	1		6.76E-05	10
test_cases/k-10.txt	10	45	1	1.880996887		10
test_cases/k-11.txt	11	55	1	0.00031465		11
test_cases/k-11.txt	11	55	1	0.00028153		11
test_cases/k-11.txt	11	55	1	0.000274027		11
test_cases/k-11.txt	11	55	1	0.000275784		11
test_cases/k-11.txt	11	55	1	0.000276803		11
test_cases/k-11.txt	11	55	1	0.000499272		11
test_cases/k-11.txt	11	55	1	0.000276955		11
test_cases/k-11.txt	11	55	1	0.000272689		11
test_cases/k-11.txt	11	55	1	0.000262864		11
test_cases/k-11.txt	11	55	1	0.000264531		11
test_cases/k-11.txt	11	55	1		0.000113964	11
test_cases/k-11.txt	11	55	1	22.3668257		11
test_cases/k-12.txt	12	66	1	0.000310714		12
test_cases/k-12.txt	12	66	1	0.000326973		12
test_cases/k-12.txt	12	66	1	0.000359755		12
test_cases/k-12.txt	12	66	1	0.000321517		12
test_cases/k-12.txt	12	66	1	0.000325286		12
test_cases/k-12.txt	12	66	1	0.000321683		12
test_cases/k-12.txt	12	66	1	0.000352386		12
test_cases/k-12.txt	12	66	1	0.000312041		12
test_cases/k-12.txt	12	66	1	0.000311914		12
test_cases/k-12.txt	12	66	1	0.000317878		12
test_cases/k-12.txt	12	66	1		0.000219249	12
test_cases/k-12.txt	12	66	1	272.6869478		12
test_cases/k-13.txt	13	78	1	0.000361742		13
test_cases/k-13.txt	13	78	1	0.000383952		13
test_cases/k-13.txt	13	78	1	0.000371697		13
test_cases/k-13.txt	13	78	1	0.000382659		13
test_cases/k-13.txt	13	78	1	0.000360842		13
test_cases/k-13.txt	13	78	1	0.000406351		13
test_cases/k-13.txt	13	78	1	0.000371503		13
test_cases/k-13.txt	13	78	1	0.000452843		13
test_cases/k-13.txt	13	78	1	0.00062494		13
test_cases/k-13.txt	13	78	1	0.000367529		13
test_cases/k-13.txt	13	78	1		0.000129102	13
test_cases/k-13.txt	13	78	1	3734.149392		13
test_cases/k-14.txt	14	91	1	0.000494661		14
test_cases/k-14.txt	14	91	1	0.00076868		14

test_cases/k-14.txt	14	91	1		0.000447468		14												
test_cases/k-14.txt	14	91	1		0.000608879		14												
test_cases/k-14.txt	14	91	1		0.000412044		14												
test_cases/k-14.txt	14	91	1		0.000421167		14												
test_cases/k-14.txt	14	91	1		0.00046746		14												
test_cases/k-14.txt	14	91	1		0.000433961		14												
test_cases/k-14.txt	14	91	1		0.000571812		14												
test_cases/k-14.txt	14	91	1		0.00063145		14												
test_cases/k-14.txt	14	91	1			0.000407994	14												
test_cases/k-15.txt	15	105	1		0.000499673		15												
test_cases/k-15.txt	15	105	1		0.000588138		15												
test_cases/k-15.txt	15	105	1		0.000478451		15												
test_cases/k-15.txt	15	105	1		0.000449129		15												
test_cases/k-15.txt	15	105	1		0.000660835		15												
test_cases/k-15.txt	15	105	1		0.000463585		15												
test_cases/k-15.txt	15	105	1		0.000546104		15												
test_cases/k-15.txt	15	105	1		0.000499174		15												
test_cases/k-15.txt	15	105	1		0.000649574		15												
test_cases/k-15.txt	15	105	1		0.000467076		15												
test_cases/k-15.txt	15	105	1			0.000296233	15												
test_cases/k-16.txt	16	120	1		0.000715295		16												
test_cases/k-16.txt	16	120	1		0.000556362		16												
test_cases/k-16.txt	16	120	1		0.000929396		16												
test_cases/k-16.txt	16	120	1		0.000736452		16												
test_cases/k-16.txt	16	120	1		0.000525221		16												
test_cases/k-16.txt	16	120	1		0.001055475		16												
test_cases/k-16.txt	16	120	1		0.000820228		16												
test_cases/k-16.txt	16	120	1		0.000568603		16												
test_cases/k-16.txt	16	120	1		0.00057188		16												
test_cases/k-16.txt	16	120	1		0.000991927		16												
test_cases/k-16.txt	16	120	1			0.000294378	16												
test_cases/k-256.txt	256	32640	1		1.188885864		256												
test_cases/k-256.txt	256	32640	1		1.191565724		256												
test_cases/k-256.txt	256	32640	1		1.196169895		256												
test_cases/k-256.txt	256	32640	1		1.196456794		256												
test_cases/k-256.txt	256	32640	1		1.196180781		256												
test_cases/k-256.txt	256	32640	1		1.190491448		256												
test_cases/k-256.txt	256	32640	1		1.182916881		256												
test_cases/k-256.txt	256	32640	1		1.198520292		256												
test_cases/k-256.txt	256	32640	1		1.187019055		256												
test_cases/k-256.txt	256	32640	1		1.192495434		256												
test_cases/tiny.txt	3	2	0.666666667		0.000133183		2												
test_cases/tiny.txt	3	2	0.666666667		0.000141147		2												
test_cases/tiny.txt	3	2	0.666666667		0.000129493		2												
test_cases/tiny.txt	3	2	0.666666667		0.000138516		2												
test_cases/tiny.txt	3	2	0.666666667		0.000141046		2												
test_cases/tiny.txt	3	2	0.666666667		0.000137243		2												
test_cases/tiny.txt	3	2	0.666666667		0.000136624		2												
test_cases/tiny.txt	3	2	0.666666667		0.00014136		3												
test_cases/tiny.txt	3	2	0.666666667		0.000139737		3												
test_cases/tiny.txt	3	2	0.666666667		0.000134956		2												
test_cases/tiny.txt	3	2	0.666666667			2.27E-05	2												
test_cases/tiny.txt	3	2	0.666666667	9.53E-06			2												