			Kodim1_gray						
Matlab - JpegDNA with Paircode Python					Jpeg + Transcoding		kodim1_gray		
Compression-rate PSN		ression-rate PSNR		ession-rate PSNR		npression-rate PSNR		46	
6.384737008	44.22600911	6.31	44.22	6.07	44.22	24.3998	34.928	44	
6.489649908	44.05039746	6.41	44.05	6.17	44.05	21.404	35.7774	■ MatLab - JpegDNA + Paircode	
7.491505242	42.64841114	7.41	42.65	7.25	42.65	18.9898	36.6094	42 WidtLab - JpegDNA + Palicode	
9.232400133	40.75033579	9.15	40.75	9.08	40.75	16.0609	37.7526	E 40 → Python implementation	
10.763715	39.45521756	10.64	39.46	10.61	39.46	12.8963	39.4401	₹ 40 Python implementation	
12.1574029	38.49257624	11.99	38.49	11.99	38.49	12.149	39.9289	9 38 —Python - default frequencies	
		13.25	37.74	13.24	37.74	11.2939	40.4654		
		14.43	37.13	14.42	37.13	10.4928	41.082	Jpeg + Transcoding with exhaustive	
		15.56	36.62	15.54	36.62	9.6626	41.7815	codebooks	
		16.6	36.17	16.58	36.17	8.7474	42.6568		
		17.59	35.77	17.57	35.77			Compression rate	
			Kodim2_gray						
Matlab - JpegDNA wi	ith Paircode	Python		ython with default freq	uencies	Jpeg + Transcoding		kodim2_gray	
Compression-rate PSN		ression-rate PSNR		ession-rate PSNR		npression-rate PSNR		44	
6.166002513	42.95483696	6.1	42.95	5.99	42.95	22.483	36.5207	7 43	
6.292764895	42.81940193	6.22	42.82	6.12	42.82	18.5275	37.5545	42	
7.48086934	41.70257286	7.4	41.71	7.3	41.71	14.1915	39.0352		
9.654566213	40.12721704	9.57	40.13	9.52	40.13	13.1866	39.4431	40	
11.7562589	39.04439054	11.63	39.04	11.61	39.04	12.1091	39.8891		
13.69488161	38.21533635	13.57	38.22	13.55	38.22	11.0878	40.4055	38	
13.09488101	30.21333033	15.34	38.22 37.55		38.22 37.55	10.1035	40.4055	37 Python - derault frequencies	
		15.34 17		15.29	37.55 36.99			36	
			36.99	16.95		9.0171	41.7145		
		18.51	36.53	18.43	36.53			34 codebooks	
		19.93 21.31	36.12 35.77	19.8 21.06	36.12 35.77			5 7 9 11 13 15 17 19 21 23 25	
		21.51	35.77	21.06	33.//			Compression rate	
			Kodim3_gray					kodim3 gray	
Matlab - JpegDNA wi		Python		ython with default freq		Jpeg + Transcoding			
Compression-rate PSN		ression-rate PSNR		ession-rate PSNR		npression-rate PSNR		44	
5.961815308	42.97252813	5.9	42.97	5.8	42.97	23.7306	34.8175		
6.071579809	42.7939662	6.01	42.79	5.91	42.79	20.5281	35.5837		
7.143666885	41.3451737	7.07	41.35	6.99	41.35	16.9872	36.6661		
9.071432897	39.4268207	8.99	39.43	8.92	39.43	13.246	38.2056	£ 40	
10.81407533	38.2069859	10.73	38.21	10.67	38.21	12.3908	38.6457	W 39 → Python implementation	
12.41226814	37.34243017	12.33	37.34	12.28	37.34	11.4359	39.1461	² 38	
		13.82	36.65	13.82	36.65	10.5018	39.7598	37 —— Python - default frequencies	
		15.23	36.09	15.24	36.09	9.5971	40.4731	36	
		16.58	35.59	16.58	35.59	8.5866	41.3524	Jeg + Transcoding with exhaustive	
		17.92	35.18	17.91	35.18			34	
		19.27	34.81	19.23	34.81			5 7 9 11 13 15 17 19 21 23 25 Compression rate	
								Compression race	
Kodim4_gray Matlab - JpegDNA with Paircode Python Python					uoncios	Jpeg + Transcoding		kodim4 gray	
Compression-rate PSN	R Comp	ression-rate PSNR	Compr	ython with default frequession-rate PSNR		npression-rate PSNR		44	
4.748584057	41.58455201	4.67	41.58	4.55	41.58	24.5096	30.6014		
4.827638703	41.38260477	4.75	41.38	4.63	41.38	20.6732	31.4961		
	39.68964672				39.69				
5.585246289		5.5	39.69	5.42		18.0393	32.2564		
6.985197916	37.43431912	6.88	37.43	6.87	37.43	15.79	33.0532	Z Python implementation	
8.316575369	35.99358349	8.22	35.99	8.22	35.99	13.1065	34.1808	¥ 36	
9.540343737	34.96508748	9.45	34.97	9.45	34.97	10.2261	35.9825		
		10.6	34.17	10.59	34.17	9.542	36.5118		
		11.66	33.56	11.65	33.56	8.8085	37.0992	→ Ineg + Transcoding with exhaustive	
		12.66	33.05	12.64	33.05	8.118	37.8106	30 codebooks	
		13.6	32.62	13.56	32.62	7.4341	38.6562	3 8 13 18 23	
		14.52	32.26	14.45	32.26	6.7038	39.6982	Compression rate	
			Kodim5_gray						
Matlab - JpegDNA wi	ith Paircode	Python		ython with default freq	uencies	Jpeg + Transcoding		kodim5_gray	
Compression-rate PSN		ression-rate PSNR		ession-rate PSNR		npression-rate PSNR		46	
7.404500518	44.5225567	7.33	44.524	7.24	44.524	26.9265	38.5027	1	
7.551	44.3987	7.48	44.398	7.39	44.398	22.4445	39.4911	44	
9.0507	43.3263	8.95	43.326	8.9	43.326	17.3524	40.8594		
11.8429	41.8666	11.7	41.87	11.68	41.87	16.2014	41.2363		
14.3427	40.8683	14.18	40.87	14.17	40.87	14.8178	41.6491		
16.5479	40.096	16.37	40.098	16.37	40.098	13.4966	42.1346	e.	
20.5-75	-10.030	18.43	39.48	18.42	39.48	12.2699	42.6771		
		20.31	38.97	20.26	38.97	10.8173	43.3381	36	
		20.31	38.51	21.98	38.51	10.01/3	75.5501	—●—Jpeg + Transcoding with exhaustive	
		22.14	38.51	21.98	38.51			34 codebooks	
		23.9	38.12 37.77	25.21	38.12 37.77			5 10 15 20 25	
		23.02	31.11	43.41	3/.//			Compression rate	