

Example Vectors

AES-128 ($Nk=4$, $Nr=10$)

PLAINTEXT: 3243f6a8885a308d313198a2e0370734
KEY: 2b7e151628aed2a6abf7158809cf4f3c

CIPHER (ENCRYPT):

round[0].input	3243f6a8885a308d313198a2e0370734
round[0].k_sch	2b7e151628aed2a6abf7158809cf4f3c
round[1].start	193de3bea0f4e22b9ac68d2ae9f84808
round[1].s_box	d42711aee0bf98f1b8b45de51e415230
round[1].s_row	d4bf5d30e0b452aeb84111f11e2798e5
round[1].m_col	046681e5e0cb199a48f8d37a2806264c
round[1].k_sch	a0fafe1788542cb123a339392a6c7605
round[2].start	a49c7ff2689f352b6b5bea43026a5049
round[2].s_box	49ded28945db96f17f39871a7702533b
round[2].s_row	49db873b453953897f02d2f177de961a
round[2].m_col	584dcaf11b4b5aacdbe7caa81b6bb0e5
round[2].k_sch	f2c295f27a96b9435935807a7359f67f
round[3].start	aa8f5f0361dde3ef82d24ad26832469a
round[3].s_box	ac73cf7befc111df13b5d6b545235ab8
round[3].s_row	acc1d6b8efb55a7b1323cfd457311b5
round[3].m_col	75ec0993200b633353c0cf7cbb25d0dc
round[3].k_sch	3d80477d4716fe3e1e237e446d7a883b
round[4].start	486c4eee671d9d0d4de3b138d65f58e7
round[4].s_box	52502f2885a45ed7e311c807f6cf6a94
round[4].s_row	52a4c89485116a28e3cf2fd7f6505e07
round[4].m_col	0fd6daa9603138bf6fc0106b5eb31301
round[4].k_sch	ef44a541a8525b7fb671253bdb0bad00
round[5].start	e0927fe8c86363c0d9b1355085b8be01
round[5].s_box	e14fd29be8fbfbba35c89653976cae7c
round[5].s_row	e1fb967ce8c8ae9b356cd2ba974ffb53
round[5].m_col	25d1a9adbd11d168b63a338e4c4cc0b0
round[5].k_sch	d4d1c6f87c839d87caf2b8bc11f915bc
round[6].start	f1006f55c1924cef7cc88b325db5d50c
round[6].s_box	a163a8fc784f29df10e83d234cd503fe
round[6].s_row	a14f3dfe78e803fc10d5a8df4c632923
round[6].m_col	4b868d6d2c4a8980339df4e837d218d8
round[6].k_sch	6d88a37a110b3efddb9f98641ca0093fd
round[7].start	260e2e173d41b77de86472a9fdd28b25
round[7].s_box	f7ab31f02783a9ff9b4340d354b53d3f
round[7].s_row	f783403f27433df09bb531ff54aba9d3
round[7].m_col	1415b5bf461615ec274656d7342ad843
round[7].k_sch	4e54f70e5f5fc9f384a64fb24ea6dc4f
round[8].start	5a4142b11949dc1fa3e019657a8c040c
round[8].s_box	be832cc8d43b86c00ae1d44dda64f2fe
round[8].s_row	be3bd4fed4e1f2c80a642cc0da83864d
round[8].m_col	00512fd1b1c889ff54766dcdfa1b99ea
round[8].k_sch	ead27321b58dbad2312bf5607f8d292f

round[9].start	ea835cf00445332d655d98ad8596b0c5
round[9].s_box	87ec4a8cf26ec3d84d4c46959790e7a6
round[9].s_row	876e46a6f24ce78c4d904ad897ecc395
round[9].m_col	473794ed40d4e4a5a3703aa64c9f42bc
round[9].k_sch	ac7766f319fadc2128d12941575c006e
round[10].start	eb40f21e592e38848ba113e71bc342d2
round[10].s_box	e9098972cb31075f3d327d94af2e2cb5
round[10].s_row	e9317db5cb322c723d2e895faf090794
round[10].k_sch	d014f9a8c9ee2589e13f0cc8b6630ca6
round[10].output	3925841d02dc09fbdc118597196a0b32