Decrypt the ElGamal ciphertext presented in Table 7.4. The parameters of the system are p=31847,  $\alpha=5$ ,  $\alpha=7899$  and  $\beta=18074$ . Each element of  $\mathbb{Z}_n$ represents three alphabetic characters as in Exercise 6.12. The plaintext was taken from The English Patient, by Michael Ondaatje, Alfred A. Knopf, Inc., New York, 1992.