

Marchbanks,” by Robertson Davies., Clarke Irwin, 1947. (Hint. A simple computer program will surely help here. Finding the keyword length and producing a table similar to Table 1.4 in the Stinson text is worth nearly full credit even if you don’t figure out what the text says.)

```
˘ KCCPKBGUFDPHQTYAVINRRTMVGRKDNBVFDETDGILTXRGUD
DKOTFMBPVGEGLTGCKQRACQCWDNAWCRXIZAKFTLEWRPTYC
QKYVXCHKFTPONCQQRHJVAJUWETMCMSPKQDYHJVDAHCTRL
SVSKCGCZQQDZXGSFRLSWCWSJTBHAFS IASPRJAHKJRJUMV
GKMITZHF PDI SPZLVLGWTFPLKKEBDPGCEBSHCTJRWXBAPS
PEZQNRWXC VYCGAONWDDKACKAWBBIKFTIOVKCGGHJVLNHI
FFSQESVYCLACNVRWBBIREPBVFEXOSCDYGZWPFDTKFQIY
CWHJVLNHIQIBTKHJVNP IST
```

Figure 3.2. Ciphertext obtained using a Vigenère Cipher

Exercise 3.3. (Stinson 1.26) We describe a special case of a *Permutation Cipher*. Let m, n be positive integers. Write out the plaintext, by rows, in $m \times n$ rectangles. Then form the ciphertext by taking the columns of these rectangles. For example, if $m = 4, n = 3$, then we would encrypt the plaintext “*cryptography*” by forming the following rectangle:

```
cryp
togr
aphy
```

The ciphertext would be “CTAROPYGHPRY”

- a. Describe how Bob would decrypt a ciphertext string (given values for m and n).
- b. Decrypt the following ciphertext, which was obtained by using this method of encryption:

MYAMRARUYIQTENCTORAHROYWDSOYEOUARRGDERNOGW