**Hand-Trace of Row/Column Transposition**

Encrypt the following String:

SECRET MESSAGE

numColumns = 3

With spaces removed, numRows will be calculated to be 5

2 Xs added to String=>

SECRETMESSAGEXX

Trace the nested for loops:

|  |  |  |  |
| --- | --- | --- | --- |
| col | index | row | ciphertext |
| 0 | 0 |  |  |
|  | 3 | 0 | S |
|  | 6 | 1 | SR |
|  | 9 | 2 | SRM |
|  | 12 | 3 | SRMS |
|  | 15 | 4 | SRMSE |
| 1 | 1 |  |  |
|  | 4 | 0 | SRMSEE |
| etc |  |  |  |