

Assignment #1 Answer Sheet

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Completed in Java JDK 16, using IntelliJ IDEA 2021.

Program files located in src/Main.java

1.

Plaintext:	This is assignment one from cryptography and network security. It is submitted by Wilana Matthews, a third year computer science student. I hope I do well.
Key:	16, 2, 22, 0, 21, 25, 3, 8, 20, 14, 5, 10, 26, 9, 15, 12, 24, 6, 27, 7, 13, 19, 18, 23, 17, 28, 4, 11, 1
Ciphertext from program:	HIU,EU,EQ,,UDJ VJHEPJVEZGP EWGRMHPDGQMIREQJAEJVHSPGFE,VWNGUHRBEUHEU,E,NC UHHVAECRESUKQJQE QHHIVS,LEQEHIUGAERVQGEWP MNHVGE,WUVJWVE,HNAVJHBEUEIPMVEUEAPESVKKB

2.

Used X to pad, because it is one of the least common letters and it is commonly used as a variable in math, so I feel it would intuitively be seen as extra content.

Plaintext:	I like dogs
m value:	4
Key:	3, 4, 1, 2
Ciphertext:	IKILOGEDXXSX
Decryption:	ILIKEDOGSXXX

3.

Plaintext:	ILIKEDOGSXXX
Ciphertext:	IKILOGEDXXSX
m value:	4
Key:	3 4 1 2