Deloitte.

Background

Create a class with two methods, "encode" and "decode". The methods have some properties outlined below:

- Each method takes a message String and an int representing the number of rotations in the code.
- Each method returns a String, which is the encoded or decoded message.
- Encoding and decoding only affects alphabetical characters that are contained in the US ASCII standard.
- All other characters are unaffected.
- The encoding of a character with a given number of rotations is the character that alphabetically succeeds its "rotations" times.
    - When rotating an alphabetical character, to rotate past the end of the alphabet is to continue on the other end of the alphabet.
        - For example, 'e' encoded with 5 rotations is 'j'; 'z' encoded with 1 rotation is 'a'; 'X' encoded with 7 rotations is 'E'.
- The decoding of a character is the inverse function of the encoding of a character.
    - For example, 'j' decoded with 5 rotations is 'e'; 'a' decoded with 1 rotation is 'z'; 'E' decoded with 7 rotations is 'X'.

For example, the word “HELLO” encoded with 5 rotations is “MJQQT”. The word “BTWQI” decoded with 5 rotations is “WORLD”.

INSTRUCTIONS

Write this class. Encode the String "innoWake rules" with 9 rotations and decode the String “IUHUR" with 6 rotations.

Return your written solution including the Java sourcecode.