



Vault of Codes

Assignment: "Basic Text Encoder and Decoder"

```
import java.util.Scanner;

Qodo Gen: Options | Qodo Gen: Options | Test this class | Test this class
public class TextEncoderDecoder {
    public TextEncoderDecoder() {
    }

    Qodo Gen: Options | Qodo Gen: Options | Test this method | Test this method
    public void displayMenu() {
        System.out.println(x:"=== Text Encoder and Decoder ===");
        System.out.println(x:"1. Encode a message");
        System.out.println(x:"2. Decode a message");
        System.out.println(x:"3. Exit");
        System.out.print(s:"Choose an option: ");
    }

    Qodo Gen: Options | Qodo Gen: Options | Test this method | Test this method
    public static String encodeMessage(String var0, int var1) {
        return processMessage(var0, var1);
    }

    Qodo Gen: Options | Qodo Gen: Options | Test this method | Test this method
    public static String decodeMessage(String var0, int var1) {
        return processMessage(var0, -var1);
    }

    Qodo Gen: Options | Qodo Gen: Options | Test this method | Test this method
    public static String processMessage(String var0, int var1) {
        StringBuilder var2 = new StringBuilder();
        char[] var3 = var0.toCharArray();
        int var4 = var3.length;

        for(int var5 = 0; var5 < var4; ++var5) {
            char var6 = var3[var5];
            if (Character.isLetter(var6)) {
                int var7 = Character.toUpperCase(var6) ? 65 : 97;
                int var8 = (var6 - var7 + var1 + 26) % 26 + var7;
                var2.append((char)var8);
            } else {
                var2.append(var6);
            }
        }

        return var2.toString();
    }
}
```

```
public class TextEncoderDecoder {  
    Run | Debug | Run main | Debug main | Qodo Gen: Options | Qodo Gen: Options | Test this method | Test this method  
    public static void main(String[] var0) {  
        Scanner var1 = new Scanner(System.in);  
        boolean var2 = true;  
  
        for(boolean var3 = false; var2; System.out.println()) {  
            displayMenu();  
            int var4 = var1.nextInt();  
            var1.nextLine();  
            int var9;  
            switch (var4) {  
                case 1:  
                    System.out.print(s:"Enter the message to encode: ");  
                    String var5 = var1.nextLine();  
                    System.out.print(s:"Enter the shift value: ");  
                    var9 = var1.nextInt();  
                    var1.nextLine();  
                    String var6 = encodeMessage(var5, var9);  
                    System.out.println("Encoded Message: " + var6);  
                    break;  
                case 2:  
                    System.out.print(s:"Enter the message to decode: ");  
                    String var7 = var1.nextLine();  
                    System.out.print(s:"Enter the shift value: ");  
                    var9 = var1.nextInt();  
                    var1.nextLine();  
                    String var8 = decodeMessage(var7, var9);  
                    System.out.println("Decoded Message: " + var8);  
                    break;  
                case 3:  
                    var2 = false;  
                    System.out.println(x:"Exiting the program. Goodbye!");  
                    break;  
                default:  
                    System.out.println(x:"Invalid choice. Please try again.");  
            }  
        }  
  
        var1.close();  
    }  
}
```

```
=== Text Encoder and Decoder ===
1. Encode a message
2. Decode a message
3. Exit
Choose an option: 1
Enter the message to encode: Hello VOC!
Enter the shift value: 1
Encoded Message: Ifmmp WPD!

=== Text Encoder and Decoder ===
1. Encode a message
2. Decode a message
3. Exit
Choose an option: 2
Enter the message to decode: Ifmmp WPD!
Enter the shift value: 1
Decoded Message: Hello VOC!

=== Text Encoder and Decoder ===
1. Encode a message
2. Decode a message
3. Exit
Choose an option: 3
Exiting the program. Goodbye!
```

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