

1.4 Function Call

In my video, I will show

- Array
- Methods (or functions)
 - Encryption Method
 - Decryption Method
- Pass Inputs into a Method
- Return
- For loop

HW14. Separate Method (function) for encryption

1. Write a simple message and make a hidden message using alphabetic numbers.

Simple message has alphabets only

Example: Simple message

```
"Hi Katie Have you finished computer science homework it is so fun if you want I can help you"
```

2. Create a secret message using the map(function) below.

```
String simpleMessage = "Hi Katie Have you finished computer science homework it is so fun if you want I can help you";  
//           0         1         2         3         4         5         6         7         8         9  
//           0123456789012345678901234567890123456789012345678901234567890123456789012345678901
```

3. Write a **Method(function)** for encryption/decryption and call the Method.
4. Make a tutorial video

Example















```
1 package homework;
2
3 import java.util.Scanner;
4
5 public class HW14 {
6
7     public static void main(String[] args) {
8         int[] numCode = {21, 45, 67, 35}; //Array
9
10        Scanner keyboardInput = new Scanner(System.in);
11        System.out.print("Enter password: ");
12        String password = keyboardInput.nextLine();
13
14        if (password.contentEquals("ilovecs")) {
15            System.out.println(HW14.encryption(numCode)); // Call a Method (function)
16        } else {
17            System.out.println("Incorrect password");
18        }
19    }
20
21    public static String encryption(int[] num) {
22
23        for(int i=0; i < num.length ; i++) {
24            System.out.print(num[i] + "=> "); // Before Encryption
25            num[i]=(int)(Math.pow(num[i], 2) +3); // Encryption
26            System.out.println(num[i]); // After Encryption
27        }
28        return "The code is successfully encrypted";
29    }
30 }
31
32
33
34
```

Console

```
<terminated> HW14 [Java Application] C:\Program Files\AdoptOpenJDK\jdk-11.0.4.11-hotspot\bin\javaw.exe (2019. 8. 2)
Enter password: ilovecs
21=> 444
45=> 2028
67=> 4492
35=> 1228
The code is successfully encrypted
```

1.4 Array, Method and For Loop

- Watch new videos. (Don't forget Video 21)
- <https://www.youtube.com/watch?v=C3aWV0cTfpY&list=PLLAZ4kZ9d&index=8>
- Type and run every code in the videos.

12	 	Arrays Java Tutorial 12
	array: 8:47	Mike Dane
13	 	Methods Java Tutorial 13
	meth: 11:01	Mike Dane
14	 	Return Statements Java Tutorial 14
	return statements: 7:37	Mike Dane
15	 	If Statements Java Tutorial 15
	if statements: 12:50	Mike Dane
16	 	If Statements & Comparisons - Java - Tutorial 16
	if statements & comparisons: 6:17	Mike Dane
17	 	Building a better Calculator Java Tutorial 17
	building a better calculator: 7:02	Mike Dane
21	 	For Loops Java Tutorial 21
	for loops: 10:07	Mike Dane

Project 13: Make my Encryption/Decryption

- You should show: Scanner, Math, If else, encryption function
- You email your friend a simple message with a hidden message, encryption function
- Decode your friend's hidden message using an encryption function.

```
Scanner keyboardInput = new Scanner(System.in)
System.out.print("Enter password : ")
String password = keyboardInput.nextLine();
If (password.contentEquals("my password")) {
    System.out.println(Math.sqrt(444-3)) // =21
} else {
}
```

Example

- Post HW14 in your Youtube

```
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24        for(int i=0; i < num.length ; i++) {
25            System.out.print(num[i] + "=> "); // Before Encryption
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Console

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<terminated> HW14 [Java Application] C:\Program Files\AdoptOpenJDK\jdk-11.0.4.11-hotspot\bin\javaw.exe (2019. 8.
Enter password: ilovecs
21=> 444
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```

Post a Youtube playlist link to the shared document

- Post HW14 in your Youtube
- Shared doc

https://docs.google.com/spreadsheets/d/1F4JB2kggC6Imp2JOYyjncmnEYHSEV1VP16oCm_Nq75c/edit#gid=0