

Lab # 6 *Takahiro Mitsuhashi*
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CPSC 1150 - 003 Instructor:

H. Darbandi Lab Title:
Practice with Top-down
design, Pseudo code, and
methods

Formula Lab Date
submitted: June 25th

Department:
CSIS

Program Lab5 File Name: Lab6.java Purpose: To get the binary numbers of message with cipher key of integer number which is typed by keyboard.

Technical Information: (You should fill the following information based on compiler and computer you are using). Compiler: Java SDK version 10.0.1

Computer: something like :: Intel(R) Core (™) i5-6300U CPU 2.40GHz 2.50GHz, 4.00GB

Operating System: 64-bit Operating System, x64-based processor (Windows 10)
Language: Java

Program Logic (Pseudocode) Algorithm: read the message of String as every single character to convert String to binary. when getting the ASCII code, pass the method of converter then we can get the binary numbers.

START :

1.
set num(for key), numOfstring(for the amount of string) ← int
set message, temp ← string
2.
get the number of key by Scanner
num ← in.nextInt()
3.
get the binary by method in for loop
binary ← Integer.toBinaryString(n)

4.

Shift to another string by key

numOfstring←(int)message.charAt(i)+num

Add the binary by for loop

5.

PRINT temp after for loop

6.

PRINT the message by each line up to down

Generate your test cases based on the specifications in your lab assignment. Follow following format for each test case:

Test case1:

message="AB C"

key = 4

(message is converting to "EF G")

output of binary: **0100010101000110010000001000111**

<valid>

Test case2:

message="cpsec1150 ? Is my course!"

key =8

output of binary:

01101011011110000111101101101011001110010011100100111101001110000010100

00100011100101000010100010111101100101000011101011000000100101000011010

11011101110111110101111010011110110110110100101001

<valid>