

Students:

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21.4 Question 4 (5 marks)

In this exercise you will create a class called `LogSanitizer` that processes user log entries by replacing sensitive information. Details below

You are provided with the following files:

- `main.cpp` - starter code to use as you develop the class (non used to evaluate your code)
- `task.h` - read only header file
- `task.cpp` - you will write your C++ code here

class String Transformer**Private data member:**

```
char sanitizedLog[100];
```

a built-in array to store the user log (up to 100 characters)

Constructor to initialise the sentence:

```
LogSanitizer(const char* inputLog);
```

which stores the provided `inputLog` in the `sanitizedLog` array

Public member functions:

```
const char* sanitizeLog();
```

This function does the following:

- replace all numeric characters 0–9 with 'I'
- replace vowels (a, e, i, o, u, both uppercase and lowercase) with '*'
- returns the `sanitizedLog`

```
const char* getSanitizedLog() const;
```

- this is a getter to return the `sanitizedLog`
-

Example For the following:

```
LogSanitizer sanitizer("User ID: ABC123, Code: AEIOU");  
sanitizer.sanitizeLog();  
std::cout << sanitizer.getSanitizedLog() << std::endl;
```

the output should be:

```
"*s*r *D: *BC###, C*d*: *****"
```

NOTE: all separating spaces are unchanged from the input string

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LAB
ACTIVITY

21.4.1: Question 4 (5 marks)

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Current file: **main.cpp** ▼

[Load default template...](#)

```
1 #include <iostream>  
2 #include "task.h"  
3  
4 int main() {  
5     LogSanitizer sanitizer("User ID: ABC123, Code: AEIOU");  
6     sanitizer.sanitizeLog();  
7     std::cout << sanitizer.getSanitizedLog() << std::endl;  
8  
9     return EXIT_SUCCESS;  
10 }  
11
```

Develop mode

Submit mode

Run your program as often as you'd like, before submitting for grading. Below, type any needed input values in the first box, then click **Run program** and observe the program's output in the second box.

Enter program input (optional)

If your code requires input values, provide them here.

Run program

Input (from above)



main.cpp
(Your program)



Program output displayed here

Coding trail of your work [What is this?](#)

History of your effort will appear here once you begin working on this zyLab.

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