Continuous Assessment Cover Sheet
Faculty of Engineering

Module Details			
Module Code	**ME4550**	**Module Title**	**Object Oriented Programming**
Program: SLIIT		**Course: BSc**	
Stream: Mechatronics			

Assessment details			
Title	**In Class Activities**	**Group assignment**	**NO**
		If yes, Group No.	
Lecturer/ Instructor	**Mrs. Pabasara**	**Date of Performance**	**18.07.2023**
Due date	**26.07.2023**	**Date submitted**	**24.07.2023**

Student statement and signature

By this declaration, I/we confirm my/our understanding and acceptance that the work reported in this report is my/our own work. I/we also understand the consequences of engaging in plagiarism or copying others work without proper citation. Any material used in this work (whether from published sources, the internet or elsewhere) have been fully acknowledged and referenced and are without fabrication or falsification of data.

[Copying or plagiarism will result in a "0" mark for the continuous assessment and "F" for the module after an investigation on academic misconduct;

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By this declaration, I/we confirm my understanding and acceptance that-

- **I/we have adhered to relevant ethical guidelines and procedures in the completion of the assignment.**
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- **This work has not been submitted previously.**

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Details of the student/s submitting the assignment		Signature
ID Number	**Name (As per the institute records)**	
EN20403560	**Gunasekara MRTD**	

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Receiving Officer (seal, signature, date)	**Specific comments about the work (including overall comments and guidelines for improvement)**
	Tutor: **Signature:** **Date:**
	Marks: **[All marks are subject to external moderation and approval of board of examinations]**

1. What are the main characteristics of Object Oriented Programming languages? How are they different from procedural programming languages?

In procedural programming, it follows a sequential approach, and it focuses on executing procedures, commands, or functions step by step. But this might get messier when the instructions become larger and larger thus the code becomes longer. OOP on the other hand, it is about organizing the code into objects and classes. Data handling in OOP are encapsulated within objects such that it makes easier to manage and manipulate data but in procedural programming data is often global and can be accessed by any part of the, which can be led into data integrity issues.

2. Compare and contrast high level programming languages and low-level programming languages.

High-level programming languages are easier for people to use because they are like everyday languages with clear instructions. They work on many different types of computers. Low-level programming languages are harder for people to use because they are more like machine code and specific to certain types of computers. High-level languages are faster to write programs in, but they might not be as fast when running those programs. Low-level languages are slower to write programs in, but they can make programs run faster.

Examples of high-level languages are Python, Java, and C++. Examples of low-level languages are Assembly and C.

In class Exercise 1

1.

```cpp
#include <iostream>

using namespace std;

int main(){

    int number;
    cout << "Enter a number: " ;
    cin >> number;

    if (number % 2 == 0){
        cout << number << " is even" << endl;
    } else {
        cout << number << " is odd" << endl;
    }
    return 0;
}
```

```
Enter a number: 789
789 is odd

--------------------------------
Process exited after 3.062 seconds with return value 0
Press any key to continue . . .
```

2.

```cpp
#include <iostream>

using namespace std;

int main(){
    int number = 0;
    int largest_number = 0;

    for (int i = 0; i < 10; i++){
        cout << "Enter a number: ";
        cin >> number;
        if (number > largest_number ){
            largest_number = number;
        }else{
            //largest_number = largest_number;
        }
    }
    cout << "Largest number you entered is " << largest_number;
    return 0;
}
```

```
Enter a number: 7
Enter a number: 8
Enter a number: 9
Enter a number: 45
Enter a number: 78
Enter a number: 99
Enter a number: 554
Enter a number: 6448
Enter a number: 112
Enter a number: 65871
Largest number you entered is 65871
--------------------------------
Process exited after 13.28 seconds with return value 0
Press any key to continue . . .
```