



# Rajarata University of Sri Lanka

Faculty of Applied Sciences

B.Sc in Information and Communication Technology

ICT 1306 (Object Oriented Programming)

Practical 01: Introduction to C++ Programming

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## Outline

- Basic Program.
- If else.
- For Loop.
- While Loop.
- Switch case.
- Functions.

## Outcome

At the end of this session students should be able to:

- Familiar with the CodeBlocks IDE.
- Get knowledge about the general structure of the C++ programming.

1. Write a C++ program to print your own details.

Ex: Name, Age, Birth Day, Address, Gender, School.

2. Write C++ program for a Grading System.

- Print a banner "Welcome to My School Grading System" in the first line.
- Prompt user to enter his/her name.
- Prompt user to enter Subject Name and the Marks for 5 subjects.
- Calculate the average value of the 5 marks and display it in the following format Ex: "The average of your mark is: XXX"
- Calculate the grade based on the following criteria  
Average value > 85 -> "A"  
Average value > 70 -> "B"  
Average value > 50 -> "C"  
Average value > 25 -> "D"  
Average value < 25 -> "W"
- Display "Hi" (User's Name), you have obtained the grade: (Grade)  
Ex: Hi Sam, you have obtained the grade: A

(Hint: Use if else statements)

3. Get the following information from the user as a user input and print the design according to that requirements.



Symbol.



Number of rows.

Ex: Following design is printed as the details given by the user. (Note: Number of stars equals to the row number)

Symbol: \*

Number of rows: 5

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(Hint: Use for loops)

4. Write a program C++, which allow user to enter three integer values. Then print the reverse of those numbers.

(Hint: Use while loop)

5. Develop a basic calculator.

a. Prompt user to enter two numbers.

b. Prompt user to enter calculation.

Ex: +, -, \*, /

(Hint: Use Switch case)

6. Develop above 5<sup>th</sup> question by using functions.

## Take Home Assignment

1. Get the following information from the user as a user input and print the design according to that requirements.



Symbol.



Number of rows.

Ex: Following design is printed as the details given by the user. (Note: Number of stars equals to the row number)

Symbol: \*

Number of rows: 5

```
*
**
***
**
*
```

## Next Practical: Classes and Objects