

Today's Agenda: **REVISION OF BASIC PROGRAMMING CONCEPTS**

Objectives:

- Revision of functions for outputting to the screen and taking input from the user in C
- Purpose of Preprocessor Directives
- Using the header files
- Revision of the compilation process of a program
- Transitioning from a program C to a C++ program
- Main function as the entry point of the program
- Abstaining from using an IDE
- Getting to know open source compilers such as GCC
- Concept of namespace in C++ and other high level programming languages
- Using the cout and cin objects for outputting and taking input in C++

Lab Tasks:

1. Write a C++ program to display "Asalam Alykum!" on the screen.
2. Write a C++ program to display Your Name, Address and City on different lines
3. Write a C++ program to find the area of a circle using the formula:
$$\text{Area} = \text{PI} * r^2$$
4. Write a C++ program to find the area and volume of sphere.
Formulas are: $\text{Area} = 4 * \text{PI} * R * R$ $\text{Volume} = 4/3 * \text{PI} * R * R * R$.
5. Write a C++ program to print the multiply value of two accepted numbers
6. Write a C++ program to convert centigrade into Fahrenheit.
Formula: $C = (F - 32) / 1.8$.
7. Write a C++ program that declares 5 integers, determines and prints the largest and smallest in the group.
8. Write a C++ program that declares two integers, determines whether the first is a multiple of the second and print the result. [Hint: Use the remainder operator.]

P.S.: Code should be properly indented and commented