CAP445
OBJECT ORIENTED PROGRAMMING USING C++(Lab)

Session #1

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How to start?

- **Install CodeBlocks IDE/**https://www.onlinegdb.com/online_c++_compiler

- **Structure of a program**

Example:

```cpp
//This is hello world program
#include <iostream>
using namespace std;
int x=10// global variable
int main()
{
    int y=20;// local variable
    cout << x << endl;
    cout << y << endl;
    return 0;
}
```

Structure of a program

Document section

Preprocessor statement

Std Namespace

Global variable declaration

Main Function

Document section

- Using single line comments and multiline comments

// single line

/* multi

Line

Comments */

Preprocessor statement

The preprocessors are the directives, which give instructions to the compiler to preprocess the information before actual compilation starts.

preprocessor directives begin with #

std Namespace

First of all, you need to know what c++ namespaces are?

using namespace "std" means we use the namespace named std. "std" is an abbreviation for standard. So that means we use all the things with in "std" namespace.

In programming, we cannot have variables, functions, etc with the same name. So to avoid those conflicts we use namespaces.

Practice Questions:

1. Arithmetic operations by using (+,-,*,/,%,**)
2. A Piggybank contains 10 Rs coin, 5 Rs coin , 2 Rs coin and 1 Rs coin then calculate total amount.
3. "Generate electricity bill from the following conditions:

Condition 1. If meter reading is more then 100 charagble amount will be 6.95 Rs per unit.

Condition 2. If meter reading is less then 100 charagble amount will be 5.95 Rs per unit."

4. CGPA Calculator
5. Employee Salary Calculation

Practical Question:

A mobile shop having offer 10% discount if you will purchase mobile phone with power bank.

Option1:mobile

Option2: power bank

In which case customer will get 10% discount?

A. if(Option1&&Option2) : 10% discount

B. if(Option1||Option2) : 10% discount

C. if(Option1&Option2) : 10% discount