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<Self learning notes>

TUTORIAL 8: ENCAPSULATION

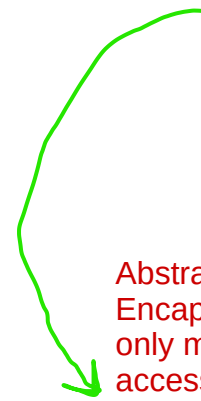
Encapsulation : Grouping similar data and function inside one unit / capsule

Encapsulation: Hide sensitive content from outer world. Example: “Driver can drive the car but don’t know how it works or build”

Main reason to use Encapsulation for code security and make code more protected .

Access specifier used here for change attribute accessibility.

>> Private member of the class can not directly accessible from outside of class. For set the value of this private member/attribute either we can use function/method declared into same class or use constructor, same way to read value of private member we can use same class function/method to get that value. This methodology known as “GET SET” method.



Abstraction is more focused on hide un necessary data, Encapsulation is more focused on grouping data (Fun + Var), and only member function can accessed of member data, no direct access is possible for object / or outside class.

Example

```
#include<iostream>

using namespace std;

class employee{

//private member

private:

   int salary;


//Public member

public:

   string name;


   //method to set salary (private member)

   void set_salary(int x=5000)  //minimum amount

   {
```

```
        salary = x;
    }

    //method to get salary  (private member)
    int get_salary(void)
    {

        return salary;
    }

};

int main()
{

//Object create
    employee AIPL2430;

    //Set name of employee
    AIPL2430.name="Jaydeep Shah";

    //Set salary
    AIPL2430.set_salary(50000);

    //Print data
```

```
    cout<<"Employee name is "<<AIPL2430.name<<" and salary = "<<AIPL2430.get_salary();
    return 0;
}
```