Subject: Date: 25/02/15

(Lecture 21) Virtual Function

- Virtual function is a function, which is not accessable by ~~(base)~~ child class.
- To hide any function of parent class from child class, write "virtual" in start of function name.

Example program for Virtual function.

```
class Animal
{
    public:
     void move ( )
     {
        cout << " Move of Animal ";
     }
};

class Horse : public Animal
{
    public:
      virtual void move ( ) // Virtual: To hide
                               This function
```

Subject: _____ Date: _____

```
    {
        cout << " Run ";
    }
};
class Fish: public Animal
{
    public:
        void move ( )
        {
            cout << " Swim ";
        }
};
int main ( )
{
    Animal * A;
    A = new Animal;
    A.move ( );          // Output: Move of Animal
    delete A;
    A = new Horse;
    A.move ( );          // Output: Run
    delete A;
    A = new Fish;
    A.move ( );          // Output: Swim
    delete A;
    return 0;
}
```

Subject: Date:

Abstract Class:-

If is a class, which is assumed to have no object of its own but if can be a parent class of other class.

You can create object of its child class and this object will contain all attributes of its own class and parent class.

How to write abstract class?

If a class contains atleast one pure virtual function then it becomes an abstract class.

Syntax for pure virtual function.

```
class Animal
{
    public
    virtual void move ( ) = 0 ;

};
```

Now this class became Abstract class