© Rajat Kumar
https://www.linkedin.com/in/imRajat/
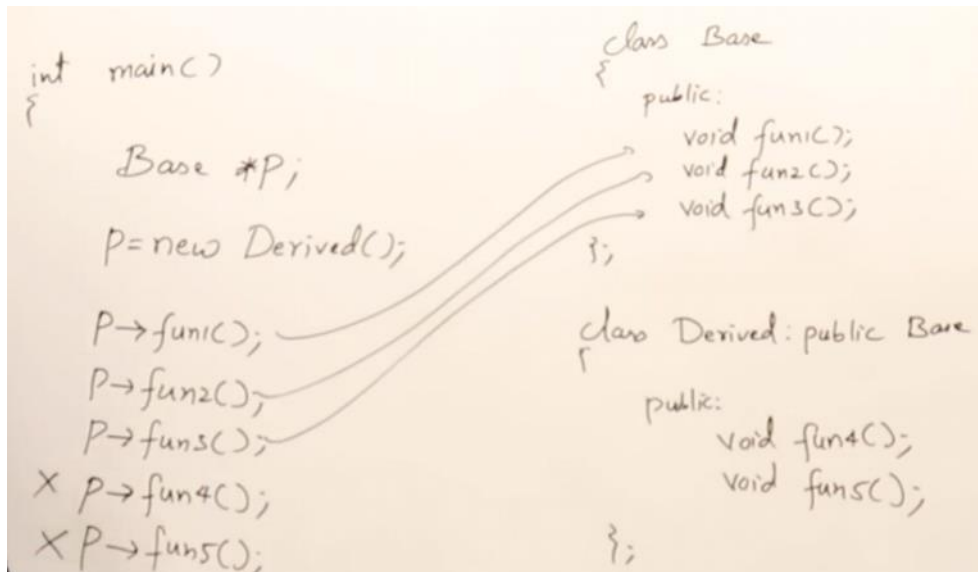https://github.com/im-Rajat

Section 15 : Base Class Pointer Derived Class Object

- We can have a base class pointer and a derived class object attached to it and we can call only those functions which are present in base class. We cannot call the functions which are defined in the derived class.
- The pointer is of base class. So we can call the functions which are available in base class only.

- What if the pointer is of derived class and we assign object of base class? It's not possible

- Example of Car, Basic Car and advanced car (inheriting functionality from basic car)
- So it means the methods of advanced car are not present in basic car. So you cannot call basic car an advanced car, but we can call an advanced car a basic car because it has all basic features also.

- Example :
  ```
  Derived d;
  //d.func1();
  //d.func2();

  Base *ptr = &d;   // same as Base *ptr = new Derived();
  // new Derived is same as new Derived();

  ptr->func1();
  ptr->func2();   // error

  Base b;
  Derived *ptr2 = &b;   // error
  ```