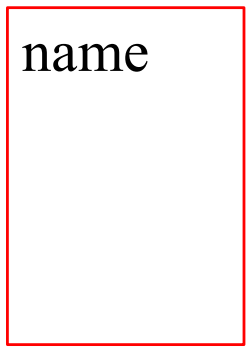
```
class Person{
string name;
}
class Employee : public Person{
int empid;
double salary;
}
class Student : public Person{
int rollno;
double marks;
}
```

Virtual Destructor
- It is used to have late binding of the destructors
- When upcasting is done, then after the objects are deleted then only the base class dtor gets called.
- To give a call to the derived class dtor declare the base class dtor as virtual



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Advanced Casting Operators

1. dynamic_cast
   - It is used at the time of downcasting. It return NULL if downcasting fails.
   - To use dynamic_cast the classes should be polymorphic
   - i.e atleast 1 function in the base class should be virtual
2. static_cast
   - If the classes are not polymorphic but their is inheritance between the entities then we can use static_cast.
   - This is bit risker type of casting.
3. reinterprest_cast
   - If theor is no any relationship between the class then to convert one type of pointer into another type use this cast.
   - this is most riskiest type of casting
4. const_cast
   - To remove the const qualifier we use the const cast.

- Exception Handling
try
    - It is used to check for the exceptions generated by the functions.
catch
    - It is used to handle the exceptions occoured from the try block.
throw
    - it is used to generated exceptions.

- For a single try block we can have multiple catch block.
- A try block should atleast have 1 catch block
- We can provide a catch block that can handle all the exceptions inside it. This is called as generic catch block.
- We can provide the multiple catch block along with the generic catch block.
however the generic catch block should be the last catch block in the series.

Friend Function
- It is the non member function of a class which is designed to access the private members of the class.
- If the members are non static ,then they are accessed on class object and it they are static, they are accessed using classname and ::

Manipulators
1. Without arguments
    - endl
    - hex
    - oct
    - left
    - right
    - fixed
2. With arguments
    - setw(n)
    - setfill('$')
    - setbase(16) // hex
    - setbase(8) // oct
    - setPrecision(2)