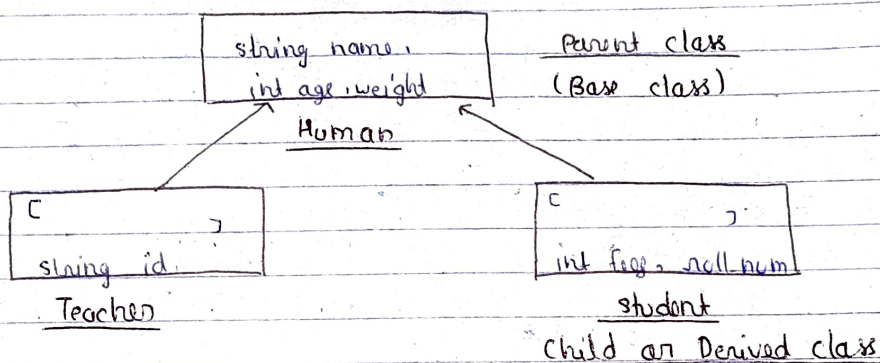


Day - 102

OOPS - 4

* Inheritance:

→ The capability of a class to derive property & characteristic from another class.



⇒ Here, we are getting properties of Human class in the Teacher & student class.

⇒ Why we have to write same code again & again if we can reuse it.

⇒ That's why we use inheritance.

| | External Code | Within class | Derived class |
|------------|---------------|--------------|---------------|
| Public: | ✓ | ✓ | ✓ |
| Protected: | ✗ | ✓ | ✓ |
| Private: | ✗ | ✓ | ✗ |

Human

```

Private:
    int a;
Protected:
    int b;
Public:
    int c;
  
```

Human Rohit

Rohit.a X

Rohit.b X

Rohit.c ✓

Syntax for Inheritance

⇒

```

class Student : _____ Human
    access modifier
    (Public / Private / Protected)
  
```

⇒

| Base | Child | | |
|--------|-----------|---|-----------|
| Public | Public | → | Public |
| Public | Protected | → | Protected |
| Public | Private | → | Private |
| Pro. | Public | → | Protected |
| Pro. | Pro. | → | Protected |
| Pro. | Private | → | Private |