Static Data Member

* They are attributes of classes or class member

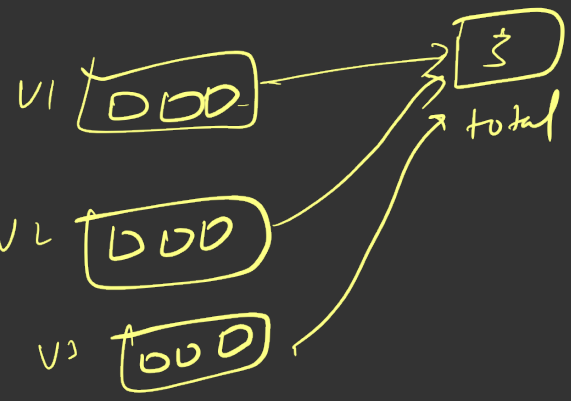
* It is decleared using static keyword

* Only one copy of that memeber is created for the entire class& is share by all the object.

* It is initializedd before any object of this class is createdd.

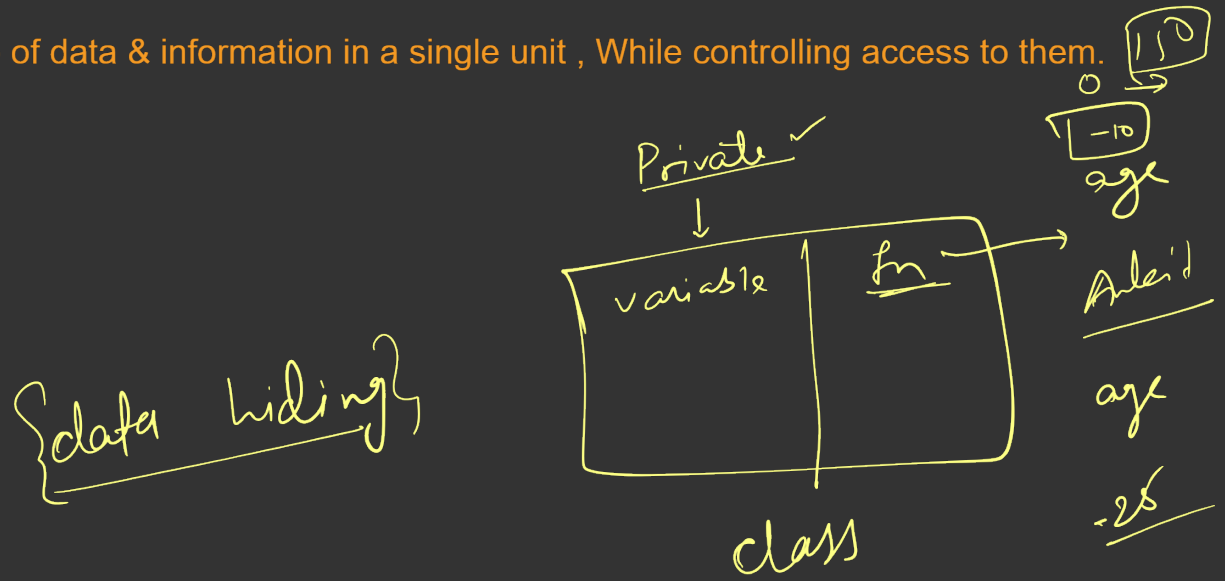
```
Class User {

    String name;
    int acno, balance
Static int total_user.

    Public:
      User(string n. int a, int b){
        name = n
        acno = a
        balance = b
        total_user++;

};  }
int User :: total_user = 0;
```

```
int main(){

    User U1("Ankit", 24368, 700);
    User U2("Khushi", 34693, 500000);
```



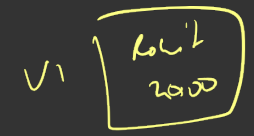
Encapsulation

Wrapping up of data & information in a single unit , While controlling access to them.



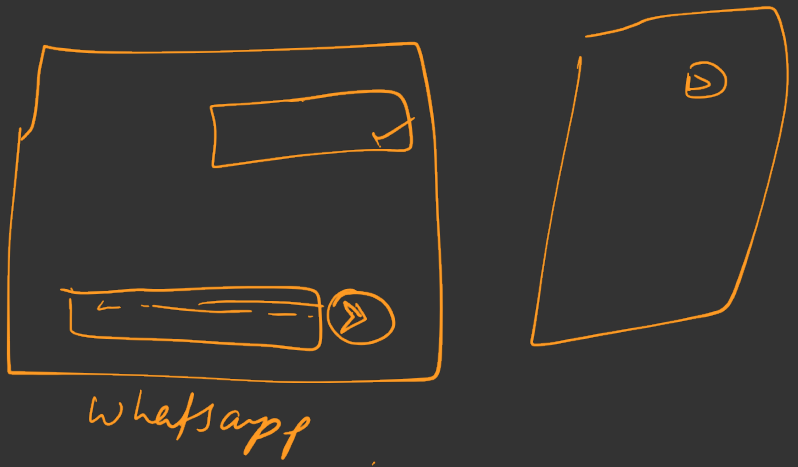
```
class User {
    string name;
    int balance;
    int age;
Public:
    User(string n, int b, int a) {
        name = n;
        balance = b;
        age = a;
    }
void deposit(int amount)
    if (amount > 0)
        balance += amount;
    else {
        cout << "Invalid";
    }
```

```
int main() {
    User U1("Rohit", 2000, 20);
    U1.deposit(10000);
    U1.deposit(-500);
```



Abstraction

* Displaying only essential information & hiding the details



```
Class User{
string name;
int balance;
Public:
    User(string n, int b)
    name: n
    balance: b;
}
void depoid (int am){
    if (am >0).
} }    balance += am;
```

```
int main(){
    User u1("Ankit", 10000);
    u1.deposit(320);
```

math.h

```
int ans= pow(2,1);
```

Swab(a, b)