Q4

a)
```cpp
class Back Account
{
    int    acct_num;
    string  name_def;
    string  acct_type;
    int bal;
    void initialize ()
    {
        acct_num = 1111;
        name_def = "ABC";
        acct_type = "  ";
        bal = 10000;
    }
    void deposit (int amt)
    {
        bal = bal + amt;
        cout << "amt << " added " << endl;
    }
    void withdraw (int amt);
    cout << amt <<" withdrawn "<< endl;
    {
        bal = bal - amt;
    if (bal <0)
        cout << "No balance" << endl;
    else {
    cout << amt << " withdrawn " << endl;
    }
    void display ()
    {
        cout << " current balance = " << bal;
    }
};
int main ()
```
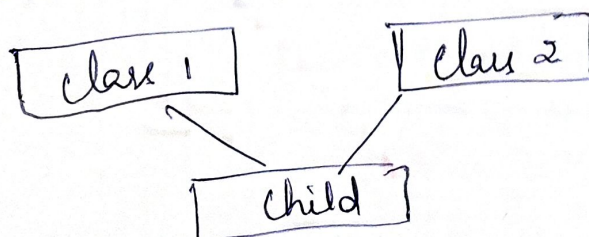
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```cpp
{
    string name, type;
    int   num, amt;
    for (int i=1 ; i<=10 ; i++)
    {
        obj [i] . initialize ();
        getline (obj [i]. name,  cin ) ;
        getline (obj [i]. type, cin );
        cin >> obj [i] . acc_num;
        cout << " Deposit amt : " ;
        cin >> amt ;
        obj [i]. deposit (amt);
        obj [i]. display ();
        cout << " With draw amt :";
        cin >> amt1;
        obj [i] . with draw (amt1);
        obj [i] . display ();
    }
    return 0;
}
```

b) Inheritance is a process in which one object acquires all the properties and behaviours of its parent object. In this, we can reuse, enter or modify the attributes and behaviours defined in other classes.

Multiple Inheritance.

```
┌─────────┐        ┌─────────┐
│ class 1 │        │ class 2 │
└─────────┘        └─────────┘
       \            /
        \          /
        ┌─────────┐
        │  child  │
        └─────────┘
```

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```cpp
#include <iostream>
using namespace std;
    class base1
    {
    public:
    void display()
    {
    cout << "First function of base1" << endl;
    } };

class base2
{
    public:
void display2()
    {
    cout << "Second function of base class" endl;
    }

int main()
{
    child ch;
    ch.display();
    ch.display2();
    ch.display3();
    return 0;
}

class child : public base1, public base2
{
    public:
    void display3()
    {
    cout << "Derived class" << endl;
    } };
```

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