Problem #1: Write a Circle class. Now do the following

i) Initialize radius of 3 circles

ii) Find area of all of them

iii) Find the total area

Source Code :

```
#include <bits/stdc++.h>
using namespace std;
class Circle{
    int radius;
    float area;
    double sum = 0;
    public :
        void GetInput(){
            int a;
            cin >> a;
            radius = a;
        }
        void FindArea(){
            float x = 3.1416 * radius * radius;
            area = x;
        }
        void PrintValue(){
            cout << "Radius : " << radius << '\n';
            cout << "Area : " << area << '\n';
        }
        void CalSum(){
            sum += area;
        }
        void PrintSum(){
            cout << '\n' << "Total Sum : " << sum << '\n';
        }
};
int main(void){
    Circle c;
    for (int i = 0; i < 3; i++){
        c.GetInput();
        c.FindArea();
        c.PrintValue();
    }
    c.CalSum();
    c.PrintSum();

}
```

Input :

10 10 10

Output :

Radius : 10
Area : 314.16
Radius : 10
Area : 314.16
Radius : 10
Area : 314.16
Total Sum : 314.16

Problem #2: Write a **Triangle** class. Now do the following
i) Initialize edges of a triangle
ii) Find area of the triangle
iii) Check whether the 3 edges form a triangle

Source Code :

```
#include <bits/stdc++.h>
using namespace std;
class Triangle{
    int edge1;
    int edge2;
    int edge3;
    float area;
    bool isOk;
    public :
        void GetInput(){
            int a, b, c;
            cin >> a >> b >> c;

            edge1 = a;
            edge2 = b;
            edge3 = c;
        }
        void CanForm(){
            if ((edge1 + edge2 > edge3) || (edge2 + edge3 > edge1) || (edge1 + edge3 > edge2))
               isOk = true;
            else isOk = false;
            PrintValue("decision");
        }
        void FindArea(){
            float s = (edge1 + edge2 + edge3) / 2;
            float x = sqrt(s * (s - edge1) * (s - edge2) * (s - edge3));
            area = x;
        }
        void PrintValue(string s){
            if (s == "area"){
                cout << "Area : " << area << '\n';
            }
            else if (s == "decision"){
                if (isOk) cout << "It can form triangle.\n";
                else cout << "It can't form triangle.\n";
            }
        }
};

int main(void){
    Triangle t;
    t.GetInput();
    t.FindArea();
    t.CanForm();
    t.PrintValue("area");
}
```

Input :
3 4 5

Output:
It can form triangle.
Area : 6

Problem #3: Write a Account class. Now do the following
i) Initialize 5 accounts
ii) Deposit money to an account
iii) Withdrawal money from an account
iv) Transfer money from one account to another

Source Code :

```
#include <bits/stdc++.h>
using namespace std;
class Bank{
    int AccNo;
    float Balance;
    public :
    void SetData(int n, float b){
        AccNo = n; Balance = b;
    }
    float GetBalance() return Balance;
    void SetBalance(float b)Balance += b;
    void SetWithdrawal(float b)Balance -= b;
};
Bank b[1000]; int Total = 0;
void Create(){
    int x,y;
    cout << "Enter your account no. : \n ";
    cin >> x;;
    y = b[x-1].GetBalance();
    cout << "Your Balance = " << y << '\n';
}
void Deposit(){
    int x, y;
    cout << "Enter your account no. : \n ";
    cin >> x;
    cout << "Enter amount deposit: \n";
    cin >> y;
    b[x-1].SetBalance(y);
    cout << "Deposit Successful \n";
}
void ShowBalance()cout << "It's coming :) ..\n";
int main(void){
    int option;
    while (1){
        cout << "\n\t<----- MAIN MENU ----->\n\n";
        cout << "1. New Account\n";
        cout << "2. Deposit\n";
        cout << "3. Transfer Money\n";
        cout << "4. Show Balance\n";
        cout << "5. Exit\n\n";
        cout << "Enter Your Option - ";
        cin >> option;
        if (option == 1) Create();
        else if (option == 2) Deposit();
        else if (option == 4) Transfer();
        else if (option == 5) ShowBalance();
        else if (option == 6) break;
        else cout << "You entered a wrong number.... Please Enter correct one.\n";
    }
}
```

Input & Output :

```
        <----- MAIN MENU ----->
1. New Account
2. Deposit
3. Withdrawal
4. Transfer Money
5. Show Balance
6. Exit
Enter Your Option - 6
```