

//1. Create a structure to store a student's details, write a main function to perform input and display output.

```
#include<bits/stdc++.h>
using namespace std;

// Create the student structure
struct Student {
    char* name;
    int roll_number;
    int age;
    double total_marks;
};

// Driver code
int main()
{
    int i = 0, n = 3;

    // Create the student's structure variable
    // with n Student's records
    struct Student student[n];

    // Get the students data
    student[0].roll_number = 2239546;
    student[0].name = "Dushyant";
    student[0].age = 80;
    student[0].total_marks = 10.02;

    student[1].roll_number = 2343557;
    student[1].name = "Rahul";
    student[1].age = 18;
    student[1].total_marks = 90;

    student[2].roll_number = 224893;
    student[2].name = "Abhi";
    student[2].age = 19;
    student[2].total_marks = 87.94;

    // Print the Students information
```

```

cout<<"Student Records:\n\n";
for (i = 0; i < n; i++) {
    cout<<"Name = "<< student[i].name<<endl;;
    cout<<"Roll Number = "<<student[i].roll_number<<endl;;
    cout<<"Age = "<< student[i].age<<endl;
    cout<<"Total Marks = "<< student[i].total_marks<<endl;
}

return 0;
}

```

output

Student Records:

Name = Dushyant
 Roll Number = 2239546
 Age = 80
 Total Marks = 10.02
 Name = Rahul
 Roll Number = 2343557
 Age = 18
 Total Marks = 90
 Name = Abhi
 Roll Number = 224893
 Age = 19
 Total Marks = 87.94

// create a structure to store a complex number and write a program to perform addition of two complex numbers.

```

#include<bits/stdc++.h>
using namespace std;

struct Complex {

    int real, imaginary;
    Complex(int tempReal = 0, int tempImaginary = 0)
    {
        real = tempReal;

```

```

        imaginary = tempImaginary;
    }

    Complex addComp(Complex C1, Complex C2)
    {
        Complex temp;
        temp.real = C1.real + C2.real;

        temp.imaginary = C1.imaginary + C2.imaginary;
        return temp;
    }
};

int main()
{
    Complex C1(3, 2);
    cout<<"Complex number 1 : "<< C1.real
        << " + i"<< C1.imaginary<<endl;
    Complex C2(9, 5);

    cout<<"Complex number 2 : "<< C2.real
        << " + i"<< C2.imaginary<<endl;

    Complex C3;
    C3 = C1.addComp(C1, C2);

    cout<<"Sum of complex number : "
        << C3.real << " + i"
        << C3.imaginary;
}

```

Output

Complex number 1 : 3 + i2
Complex number 2 : 9 + i5
Sum of complex number : 12 + i7