**Course Code: CSE-1221 Course Title: Computer Programming-II**

**(Assignment)**

**Answer to the question no.1**

**Source Code:**

#include <iostream>

#include <string>

using namespace std;

class Student

{

public:

    string name;

    int id;     // Only last 3 digit of student id.

    int sem;    // Only digits of semester

    string sec; // section name of the students

private:

    double cgpa;

public:

    void getData()

    {

        cout << "Enter student name: ";

        getline(cin, name);

        cout << "Enter student id: ";

        cin >> id;

        cout << "Enter semester: ";

        cin >> sem;

        cin.ignore();

        cout << "Enter section: ";

        cin >> sec;

        cout << "Enter cgpa: ";

        cin >> cgpa;

        cin.ignore();

    }

    void showData()

    {

        cout << "Name: " << name << endl;

        cout << "ID: " << id << endl;

        cout << "Sem: " << sem << endl;

        cout << "Section: " << sec << endl;

        cout << "Cgpa: " << cgpa << endl;

    }

}; // end of class.

int main()

{

    int n;

    cout << "Enter the number of students: ";

    cin >> n;

    cin.ignore();

    Student stu[n]; // Creating N number of classes for storing data.

    // Taking input.

    for (int i = 0; i < n; i++)

    {

        cout << "Enter the data of the student " << i + 1 << ":" << endl;

        stu[i].getData();

        cout << endl;

    }

    cout << endl;

    // Displaying data.

    cout << "Student data: ";

    cout << endl;

    for (int i = 0; i < n; i++)

    {

        cout << "Showing data of student " << i + 1 << ":" << endl;

        stu[i].showData();

        cout << endl;

    }

    return 0;

}

**Input:**

Enter the number of students: 2

Enter the data of the student 1:

Enter student name: Sayed Shahriar Istiyaq

Enter student id: 107

Enter semester: 2

Enter section: 2CM

Enter cgpa: 3.7

Enter the data of the student 2:

Enter student name: Shafkat Islam Rakin

Enter student id: 106

Enter semester: 2

Enter section: 2CM

Enter cgpa: 3.5

**Output:**

Student data:

Showing data of student 1:

Name: Sayed Shahriar Istiyaq

ID: 107

Sem: 2

Section: 2CM

Cgpa: 3.7

Showing data of student 2:

Name: Shafkat Islam Rakin

ID: 106

Sem: 2

Section: 2CM

Cgpa: 3.5

**Answer to the question no.2**

**Source Code:**

#include <iostream>

#include <string>

using namespace std;

class Customer

{

public:

string name;

string address;

int num; // Phone number of customers

double price[15]; // Price of items.

void getData()

{

cin.ignore();

cout << "Enter the name of the customer: ";

getline(cin, name);

// cin.ignore();

cout << "Enter the address of the customer: ";

getline(cin, address);

cout << "Enter the phone number of the customer: ";

cin >> num;

cout << "Enter the price of the 10 items: \n";

for (int i = 0; i < 10; i++)

{

cout << "Item " << i + 1 << ": ";

cin >> price[i];

}

cout << endl;

}

void showData()

{

cout << "Customer Name: " << name << endl;

cout << "Customer Address: " << address << endl;

cout << "Customer Phone Number: " << num << endl;

for (int i = 0; i < 10; i++)

{

cout << "Item " << i + 1 << ": " << price[i] << endl;

}

}

}; // End of class.

int main()

{

int n;

cout << "Enter the number of customers: ";

cin >> n;

cout << endl;

Customer c[n]; // Creating N number of customers class.

// Taking input.

for (int i = 0; i < n; i++)

{

cout << "Enter the data of the customer " << i + 1 << ":" << endl;

c[i].getData();

cout << endl;

}

cout << endl;

// Showing output.

cout << "Customer data: \n";

cout << endl;

for (int i = 0; i < n; i++)

{

cout << "Showing data of customer " << i + 1 << ":" << endl;

c[i].showData();

cout << endl;

}

return 0;

}

**Input:**

Enter the number of customers: 2

Enter the data of the customer 1:

Enter the name of the customer: Sayed Shahriar Istiyaq

Enter the address of the customer: GEC,Chittagong

Enter the phone number of the customer: 01820338019

Enter the price of the 10 items:

Item 1: 10

Item 2: 20

Item 3: 30

Item 4: 40

Item 5: 50

Item 6: 60

Item 7: 70

Item 8: 80

Item 9: 90

Item 10: 100

Enter the data of the customer 2:

Enter the name of the customer: Shafkat Islam Rakin

Enter the address of the customer: Hillview, Chittagong

Enter the phone number of the customer: 01819076210

Enter the price of the 10 items:

Item 1: 100

Item 2: 90

Item 3: 80

Item 4: 70

Item 5: 60

Item 6: 50

Item 7: 40

Item 8: 30

Item 9: 20

Item 10: 10

**Output:**

Customer data:

Showing data of customer 1:

Customer Name: Sayed Shahriar Istiyaq

Customer Address: GEC,Chittagong

Customer Phone Number: 1820338019

Item 1: 10

Item 2: 20

Item 3: 30

Item 4: 40

Item 5: 50

Item 6: 60

Item 7: 70

Item 8: 80

Item 9: 90

Item 10: 100

Showing data of customer 2:

Customer Name: Shafkat Islam Rakin

Customer Address: Hillview, Chittagong

Customer Phone Number: 1819076210

Item 1: 100

Item 2: 90

Item 3: 80

Item 4: 70

Item 5: 60

Item 6: 50

Item 7: 40

Item 8: 30

Item 9: 20

Item 10: 10