

**International Islamic University Chittagong**

**CT-1:**

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**Section: 2EM.**

**Course code: CSE – 1222**

**Course Title: Computer Programming-II Lab.**

### Question answer no :1

```
#include <bits/stdc++.h>

using namespace std;

class Student {
public:
    string name,ID,semester,section;
private:
    double cgpa;
public:
    void get_data() {
        getline(cin, name);
        getline(cin, ID);
        getline(cin, semester);
        getline(cin, section);
        cin >> cgpa;
    }
    void show_data() {
        cout << "Student Name: " << name << endl;
        cout << "Student ID: " << ID << endl;
        cout << "Semester: " << semester << endl;
        cout << "Section: " << section << endl;
        cout << "CGPA: " << cgpa << endl;
    }
};
```

```
int main() {  
    Student student1;  
  
    student1.get_data();  
    student1.show_data();  
    return 0;  
}
```

## Question answer no:2

```
#include <bits/stdc++.h>

using namespace std;

class Student {
public:
    string name, ID, semester, section;
private:
    double cgpa;
public:
    void get_data() {
        getline(cin, name);
        getline(cin, ID);
        getline(cin, semester);
        getline(cin, section);
        cin >> cgpa;
        cin.ignore();
    }

    void show_data() {
        cout << name << endl;
        cout << ID << endl;
        cout << semester << endl;
        cout << section << endl;
        cout << cgpa << endl;
    }
};
```

```
    }  
};
```

```
int main() {  
    int N;  
    cin >> N;  
    cin.ignore();  
    Student students[N];  
  
    for (int i = 0; i < N; ++i) {  
        students[i].get_data();  
    }  
    for (int i = 0; i < N; ++i) {  
        students[i].show_data();  
    }  
  
    return 0;  
}
```

### **Question answer no 3:**

```
#include<bits/stdc++.h>

using namespace std;

class Customer
{
public:
    string name,address,mobile;
    double price[10];
    void get_data()
    {
        getline(cin, name);
        getline(cin, address);
        getline(cin, mobile);
        for (int i = 0; i < 10; i++)
        {
            cin >> price[i];
        }
        cin.ignore();
    }
    void show_data()
    {
        cout << name << endl;
        cout << address << endl;
        cout << mobile << endl;
```

```
    for (int i = 0; i < 10; i++)
    {
        cout << "Price"<< i + 1 << ": " << price[i] << endl;
    }
}
```

```
int main()
{
    Customer details;
    details.get_data();

    details.show_data();
}
```

#### **Question answer no 4:**

```
#include<bits/stdc++.h>

using namespace std;

class Customer
{
public:
    string name,address,mobile;
    double price[10];
    void get_data()
    {
        getline(cin, name);
        getline(cin, address);
        getline(cin, mobile);
        for (int i = 0; i < 10; i++)
        {
            cin >> price[i];
        }
        cin.ignore();
    }
    void show_data()
    {
        cout << name << endl;
        cout << address << endl;
        cout << mobile << endl;
```



```
    for (int i = 0; i < 10; i++)
    {
        cout << "Price:" i + 1 << ": " << price[i] << endl;
    }
}
};
```

```
int main()
{
    int n;
    cin >> n;
    cin.ignore();
    Customer customers[n];
    for (int i = 0; i < n; i++)
    {
        customers[i].get_data();
    }

    for (int i = 0; i < n; i++)
    {
        customers[i].show_data();
    }
}
```

### **Question answer no 5:**

```
#include <bits/stdc++.h>

using namespace std;

class Departments
{
private:
    long long budget;
public:
    string name,cr_list[100];
    int num_of_semesters,total_sections,total_students;
    void get_info()
    {
        cout << "Enter department name: ";
        getline(cin, name);
        cout << "Enter number of semesters: ";
        cin >> num_of_semesters;
        cin.ignore();
        cout << "Enter total sections: ";
        cin >> total_sections;
        cin.ignore();
        cout << "Enter total students: ";
        cin >> total_students;
        cin.ignore();
        cout << "Enter the names of all class representatives:\n";
        for (int i = 0; i < total_sections; i++)
```

```

    {
        cout << "CR " << i + 1 << ": ";
        getline(cin, cr_list[i]);
    }
    cout << "Enter department budget: ";
    cin >> budget;
    cin.ignore();
}

void show_info()
{
    cout << "Department Name: " << name << endl;
    cout << "Number of Semesters: " << num_of_semesters << endl;
    cout << "Total Sections: " << total_sections << endl;
    cout << "Total Students: " << total_students << endl;
    cout << "Class Representatives:\n";
    for (int i = 0; i < total_sections; i++)
    {
        cout << "CR " << i + 1 << ": " << cr_list[i] << endl;
    }
    cout << "Department Budget: " << budget << endl;
}

};

int main()
{
    Departments details;

```

```
details.get_info();
cout << "\nDepartment Information:\n";
details.show_info();
}
```

### **Question answer 6:**

```
#include <bits/stdc++.h>
using namespace std;
class Departments
{
private:
    long long budget;
public:
    string name,cr_list[100];
    int num_of_semesters,total_sections,total_students;
    void get_info();
    void show_info();
};
void Departments::get_info()
{
    cout << "Enter department name: ";
    getline(cin, name);
    cout << "Enter number of semesters: ";
    cin >> num_of_semesters;
    cin.ignore();
    cout << "Enter total sections: ";
```

```

    cin >> total_sections;
    cin.ignore();
    cout << "Enter total students: ";
    cin >> total_students;
    cin.ignore();
    cout << "Enter the names of all class representatives:\n";
    for (int i = 0; i < total_sections; i++)
    {
        cout << "CR " << i + 1 << ": ";
        getline(cin, cr_list[i]);
    }
    cout << "Enter department budget: ";
    cin >> budget;
    cin.ignore();
}

void Departments::show_info()
{
    cout << "Department Name: " << name << endl;
    cout << "Number of Semesters: " << num_of_semesters << endl;
    cout << "Total Sections: " << total_sections << endl;
    cout << "Total Students: " << total_students << endl;
    cout << "Class Representatives:\n";
    for (int i = 0; i < total_sections; i++)
    {
        cout << "CR " << i + 1 << ": " << cr_list[i] << endl;
    }
}

```

```
    }  
    cout << "Department Budget: " << budget << endl;  
}  
  
int main()  
{  
    int n;  
    cin >> n;  
    cin.ignore();  
    Departments details[n];  
    for (int i = 0; i < n; i++)  
    {  
        details[i].get_info();  
    }  
    for (int i = 0; i < n; i++)  
    {  
        cout << "\nDepartment Information:\n";  
        details[i].show_info();  
    }  
}
```