

Code:

1. Write a program using C++ to find the largest number from four integers.

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int a, b, c, d;
6     cout << "Enter four integers: ";
7     cin >> a >> b >> c >> d;
8     if (a > b)
9     {
10         if (a > c)
11         {
12             if (a > d)
13             {
14                 cout << "The largest number is " << a << endl;
15                 return 0;
16             }
17         }
18     }
19     if (b > a)
20     {
21         if (b > c)
22         {
23             if (b > d)
24             {
25                 cout << "The largest number is " << b << endl;
26                 return 0;
27             }
28         }
29     }
30     if (c > a)
31     {
32         if (c > b)
33         {
34             if (c > d)
35             {
36                 cout << "The largest number is " << c << endl;
37                 return 0;
38             }
39         }
40     }
41     if (d > a)
42     {
43         if (d > b)
44         {
45             if (d > c)
46             {
47                 cout << "The largest number is " << d << endl;
48             }
49         }
50     }
51 }
```

Output:

```
Enter four integers: 25 49 19 10
The largest number is 49
```

2. Write a program using C++ to calculate CGPA.

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     float theory_1, theory_2, theory_3, theory_4, lab_1, lab_2, lab_3;
6     float total_credit = 16.5, lab_credit = 1.5, theory_credit = 3;
7     cout << "Enter the GPA of 2211 theoretical: ";
8     cin >> theory_1;
9     cout << "Enter the GPA of 2221 theoretical: ";
10    cin >> theory_2;
11    cout << "Enter the GPA of 2231 theoretical: ";
12    cin >> theory_3;
13    cout << "Enter the GPA of 2241 theoretical: ";
14    cin >> theory_4;
15    cout << "Enter the GPA of 2212 sessional: ";
16    cin >> lab_1;
17    cout << "Enter the GPA of 2222 sessional: ";
18    cin >> lab_2;
19    cout << "Enter the GPA of 2232 sessional: ";
20    cin >> lab_3;
21    float gpa = ((theory_1 * theory_credit) + (theory_2 * theory_credit)
22    + (theory_3 * theory_credit) + (theory_4 * theory_credit) +
23    (lab_1 * lab_credit) + (lab_2 * lab_credit) + (lab_3 * lab_credit)) /
24    total_credit;
25    cout << endl << "The GPA is " << gpa;
26 }
27
```

Output:

```
Enter the GPA of 2211 theoretical: 4
Enter the GPA of 2221 theoretical: 4
Enter the GPA of 2231 theoretical: 4
Enter the GPA of 2241 theoretical: 4
Enter the GPA of 2212 sessional: 4
Enter the GPA of 2222 sessional: 4
Enter the GPA of 2232 sessional: 4

The GPA is 4
```