Q1. Write a C++ program to add two numbers: -

```
#include<iostream>
using namespace std;

int main(){
    int num1, num2;
    cout << "Enter any two numbers: ";
    cin >> num1 >> num2;
    cout << "The sum of " << num1 << " and " << num2 << " is " << num1+num2 << "\n";
    return 0;
}</pre>
```

OUTPUT:

```
Enter any two numbers: 12 7
The sum of 12 and 7 is 19
```

Q2. Dynamic Initialization of variables

```
#include <iostream>
using namespace std;

int main(){
     float r, area;
     cout << "Enter the radius: ";
     cin >> r;
     area=3.14*r*r;
     cout << "Area: " << area <<"\n";
     return 0;
}</pre>
```

OUTPUT:

```
Enter the radius: 5
Area: 78.5
```

Q3. Delete operator

```
#include<iostream>
using namespace std;
int main(){
       int *a = new int(50);
       int *b = new int[50];
       int i;
       cout << "Enter array elements: \n";</pre>
       for(i=0;i<5;i++)
               cin >> *(b+i);
       cout << "\nEntered array elements are: \n";</pre>
       for(i=0;i<5;i++)
               cout << *(b+i) << " ";
       cout << "\n\v values of a is " << *a << "\n";
       delete a;
       delete []b;
}
```

OUTPUT:

```
Enter array elements:
34 45 2 41 56
Entered array elements are:
34 45 2 41 56
Values of a is 50
```

Q4. Write a C++ Program to find factorial of a number

```
#include<iostream>
using namespace std;

int main(){
    long long int i, fact, factorial=1;
    cout << "Enter any number: ";
    cin >> fact;
    if(fact<0){
        cout << "Please enter a positive integer\n";
        return 0;
    }
    for(i=fact; i>1; i--){
        factorial *= i;
    }

    cout << "Factorial of " << fact << " is " << factorial << "\n";</pre>
```

```
return 0;
```

OUTPUT:

Enter any number: 5 Factorial of 5 is 120

Q5. Write a C++ program to find the greatest of 3 numbers

```
#include <iostream>
using namespace std;

int main(){
     int num1, num2, num3;
     cout << "Enter any 3 numbers: ";
     cin >> num1 >> num2 >> num3;
     if(num1>num2 && num1>num3){
          cout << num1 << " is the greatest\n";
     }
     else if(num2>num1 && num2>num3){
          cout << num2 << " is the greatest\n";
     }
     else{
          cout << num3 << " is the greatest\n";
     }
     return 0;
}</pre>
```

OUTPUT:

```
Enter any 3 numbers: 45 2 67
67 is the greatest
```

```
Enter any 3 numbers: 45 12 23
45 is the greatest
```

```
Enter any 3 numbers: 23 34 12 34 is the greatest
```