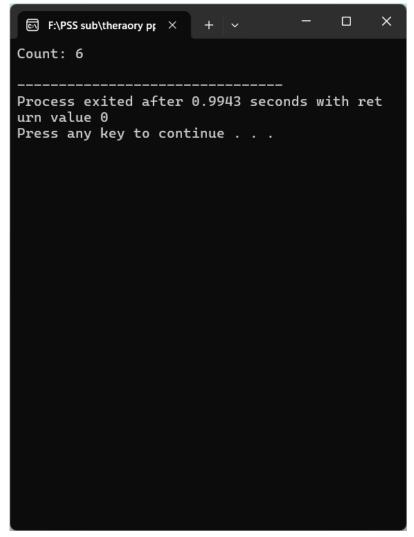
```
1: //function overloading programm
2: #include <iostream>
 3: using namespace std;
4: // Function with 2 int parameters
 5: int sum(int num1, int num2) {
6: return num1 + num2;
7: }
8: // Function with 2 double parameters
9: double sum(double num1, double num2) {
10: return num1 + num2;
11: }
12: // Function with 3 int parameters
13: int sum(int num1, int num2, int num3) {
14: return num1 + num2 + num3;
15: }
16: int main() {
17: // Call function with 2 int parameters
18: cout << "Sum 1 = " << sum(5, 6) << endl;
19: // Call function with 2 double parameters
20: cout << "Sum 2 = " << sum(5.5, 6.6) << endl;
21: // Call function with 3 int parameters
22: cout << "Sum 3 = " << sum(5, 6, 7) << endl;
23: return 0;
24: }
                                              X
       F:\PSS sub\theraory p; X
      Sum 1 = 11
      Sum 2 = 12.1
      Sum 3 = 18
      Process exited after 2.652 seconds with retu
      rn value 0
      Press any key to continue . . .
```

```
1: //function overriding program
 2: #include <iostream>
 3: using namespace std;
 4: class Base {
 5: public:
 6: virtual void print() {
 7: cout << "Base Function" << endl;
 8: }
 9: };
10: class Derived : public Base {
11: public:
12: void print() {
13: cout << "Derived Function" << endl;</pre>
14: }
15: };
16: int main() {
17: Derived derived1;
18: // Call print() function of Derived class
19: derived1.print();
20: return 0;
21: }
                                                       X
                                                  ES F:\PSS sub\theraory pr ×
             Derived Function
             Process exited after 2.451 seconds with retu
             rn value 0
             Press any key to continue . . .
```

```
1: //operator overloading program
 2: #include <iostream>
 3: using namespace std;
 4: class Count {
 5: private:
 6: int value;
 7: public:
 8: // Constructor to initialize count to 5
 9: Count() : value(5) {}
10: // Overload ++ when used as prefix
11: void operator ++() {
12: value = value + 1;
13: }
14: void display() {
15: cout << "Count: " << value << endl;</pre>
16: }
17: };
18: int main() {
19: Count count1;
20: // Call the "void operator ++()" function
21: ++count1;
22: count1.display();
23: return 0;
24: }
```



```
1: //virtual function program
 2: #include <iostream>
 3: using namespace std;
4: class Base {
5: public:
 6: virtual void print() {
7: cout << "Base Function" << endl;
8: }
9: };
10: class Derived : public Base {
11: public:
12: void print() {
13: cout << "Derived Function" << endl;</pre>
14: }
15: };
16: int main() {
17: Derived derived1;
18: // pointer of Base type that points to derived1
19: Base* base1 = &derived1;
20: // calls member function of Derived class
21: base1->print();
22: return 0;
23: }
```

