

main.cpp



Run

Output

Clear

```
1 #include <iostream>
2 using namespace std;
3
4 class Car {
5 public:
6     string brand;
7     string model;
8 };
9
10 int main() {
11     Car car1;
12     car1.brand = "Toyota";
13     car1.model = "Innova";
14
15     Car car2;
16     car2.brand = "BMW";
17     car2.model = "X5";
18
19     cout << "Car 1: " << car1.brand << " " << car1.model << endl;
20     cout << "Car 2: " << car2.brand << " " << car2.model << endl;
21
22     return 0;
23 }
```

Car 1: Toyota Innova  
Car 2: BMW X5

=== Code Execution Successful ===

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Share

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```
1 #include <iostream>
2 using namespace std;
3
4 class Student {
5 public:
6     string name;
7     int roll_number;
8
9 Student(string n, int r) {
10     name = n;
11     roll_number = r;
12 }
13
14 void display() {
15     cout << "Name: " << name << endl;
16     cout << "Roll Number: " << roll_number << endl;
17 }
18 };
19
20 int main() {
21     Student s1("Shruti", 100);
22     Student s2("Sri", 200);
23
24     cout << "Student 1 details:" << endl;
25     s1.display();
26     cout << "\nStudent 2 details:" << endl;
27     s2.display();
28
29     return 0;
30 }
```

Output

Clear

Student 1 details:  
Name: Shruti  
Roll Number: 100

Student 2 details:  
Name: Sri  
Roll Number: 200

=== Code Execution Successful ===

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main.cpp

Run

```
1 #include <iostream>
2 using namespace std;
3
4 class Calculator {
5 public:
6     int add(int a, int b) {
7         return a + b;
8     }
9     int subtract(int a, int b) {
10        return a - b;
11    }
12    int multiply(int a, int b) {
13        return a * b;
14    }
15
16    int divide(int a, int b) {
17        return a / b;
18    }
19 };
20
21 int main() {
22     Calculator c;
23     int x = 50, y = 50;
24
25     cout << "Addition: " << c.add(x, y) << endl;
26     cout << "Subtraction: " << c.subtract(x, y) << endl;
27     cout << "Multiplication: " << c.multiply(x, y) << endl;
28     cout << "Division: " << c.divide(x, y) << endl;
29
30     return 0;
}
```

Output

Addition: 100  
Subtraction: 0  
Multiplication: 2500  
Division: 1

=== Code Execution Successful ===

Clear

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main.cpp

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Run




```
1 #include <iostream>
2 using namespace std;
3
4 class BankAccount {
5 private:
6     double balance = 0;
7
8 public:
9     void deposit(int amt) {
10         balance += amt;
11         cout << "Deposited: " << amt << endl;
12     }
13     void withdraw(int amt) {
14         balance -= amt;
15         cout << "Withdrawn: " << amt << endl;
16     }
17     void checkBalance() {
18         cout << "Current Balance: " << balance << endl;
19     }
20 };
21
22 int main() {
23     BankAccount acc;
24     acc.deposit(1000);
25     acc.withdraw(500);
26     acc.checkBalance();
27     return 0;
28 }
```

Output

Clear

Deposited: 1000  
Withdrawn: 500  
Current Balance: 500  
  
=== Code Execution Successful ===

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```
1 #include <iostream>
2 using namespace std;
3
4 class Animal {
5 public:
6     void sound() {
7         cout << "Some animal sound" << endl;
8     }
9 };
10
11 class Dog :
12
13 public Animal {
14 public:
15     void sound() { cout << "Woof! Woof!" << endl;
16     }
17 };
18
19 class Cat :
20
21 public Animal {
22 public:
23     void sound() { cout << "Meow! Meow!" << endl;
24     }
25 };
26
27 int main() {
28     Dog d;
29     Cat c;
30     d.sound();
31     c.sound();
32     return 0;
33 }
```

Output

Woof! Woof!  
Meow! Meow!

=== Code Execution Successful ===

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main.cpp

Share

Run

```
1 #include <iostream>
2 using namespace std;
3
4 class Shape {
5 public:
6 void area(){
7     cout<<"Area of Shape"<<endl;
8 }
9 };
10 class Circle:
11 public Shape {
12 public:
13 void area() {
14     cout<<"Circle Area: "<<3.14*5*5<<endl;
15 }
16 };
17 class Rectangle:
18 public Shape {
19 public:
20 void area(){
21     cout<<"Rectangle Area: "<<4*6<<endl;
22 }
23 };
24 int main() {
25     Circle c;
26     Rectangle r;
27     c.area();
28     r.area();
29 }
```

Output

Clear

Circle Area: 78.5  
Rectangle Area: 24  
  
=== Code Execution Successful ===

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main.cpp

```
1 #include <iostream>
2 using namespace std;
3
4 class Vehicle {
5     public:
6     void drive() {
7         cout<<"Vehicle is moving"<<endl;
8     }
9 };
10 class Car:
11     public Vehicle {
12
13     public:
14     void drive(){
15         cout<<"Driving a Car"<<endl;
16     }
17 };
18 class Bike:public Vehicle {
19     public: void drive(){
20         cout<<"Riding a Bike"<<endl;
21     }
22 };
23 int main() {
24     Car c;
25     Bike b;
26     c.drive();
27     b.drive();
28 }
```

Run

Output

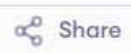
Driving a Car  
Riding a Bike

=== Code Execution Successful ===

Clear



main.cpp



Run

Output

Clear

```
1 #include <iostream>
2 using namespace std;
3
4 class Maths {
5 public:
6     int multiply(int a, int b) {
7         return a * b;
8     }
9     int multiply(int a, int b, int c) {
10         return a * b * c;
11     }
12 };
13
14 int main() {
15     Maths m;
16     cout << "Multiply 2 numbers: " << m.multiply(10, 10) << endl;
17     cout << "Multiply 3 numbers: " << m.multiply(10, 20, 4) << endl;
18     return 0;
19 }
```

```
Multiply 2 numbers: 100
Multiply 3 numbers: 800
```

=== Code Execution Successful ===



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Clear

```
1 #include <iostream>
2 using namespace std;
3 class Employee {
4 public:
5     void work() {
6         cout << "Employee is working" << endl; }
7 };
8
9 class Manager : public Employee {
10 public:
11     void work() {
12         cout << "Manager is managing the team" << endl; }
13 };
14
15 int main() {
16     Employee e;
17     Manager m;
18     e.work();
19     m.work();
20     return 0;
21 }
```

Employee is working  
Manager is managing the team

=== Code Execution Successful ===

```
main.cpp
1 #include <iostream>
2 #include <vector>
3 using namespace std;
4
5 class Library {
6     vector<string> books;
7 public:
8     void add(string book){
9         books.push_back(book);
10        cout<<book<<" added\n";
11    }
12
13    void remove(string book){
14        int i, found=0;
15        for(i=0;i<books.size();i++)
16            if(books[i]==book){
17                books.erase(books.begin()+i);
18                cout<<book<<" removed\n"; found=1; break;
19            }
20        if(!found) cout<<book<<" not found\n";
21    }
22
23    void show(){
24        cout<<"Books in library:\n"; for(string b:books) cout<<" "<<b<<endl;
25    }
26 };
27 int main(){
28     Library lib;
29     lib.add("C++ Basics");
30     lib.add("OOP Concepts");
31     lib.show();
32     lib.remove("C++ Basics");
33     lib.show();
34 }
```

Output

Employee is working  
Manager is managing the team

=== Code Execution Successful ===