

```

1 //Sources:main.cpp
2 #include <iostream>
3 #include "sportCar.h"
4 #include "Truck.h"
5 #include "Car.h"
6
7 using namespace std;
8
9 int main()
10 {
11     //Car mycar();
12     //The class car is abstract,so it can not be instantiated.
13
14     //sportCar e1();
15     //e1.print();
16     //this is error,i do not know why.
17
18     sportCar car1("White");
19     car1.print();
20     std::cout<<std::endl;
21     sportCar car2("Red",4,4);
22     car2.print();
23     std::cout<<std::endl;
24     //Truck e2();
25     //e2.print();
26     //this also is error,i do not know why.
27
28     Truck car3("Gray");
29     car3.print();
30     std::cout<<std::endl;
31
32     Truck car4("Black",6,"Gasoline");
33     car4.print();
34     std::cout<<std::endl;
35
36     Car *ptr[4];
37     ptr[0]=&car1;
38     ptr[1]=&car2;
39     ptr[2]=&car3;
40     ptr[3]=&car4;
41
42     //C++11 for range
43     for( const auto &y : ptr )
44     { // Type inference by const reference.
45         // Observes in-place. Preferred when no modify is needed.
46         // 参考: https://docs.microsoft.com/zh-cn/cpp/cpp/range-based-for-statement-cpp
47         y->print();
48     }
49     /*
50     以上代码等价:
51     for (int i = 0; i < 5; i++)
52         ptr[i]->print();
53     */
54
55     cout << endl;
56
57     return 0;
58 }
59

```