

```
1 #include <iostream>
2 #include <string>
3 using namespace std;
4
5 class Ship
6 {
7 private:
8     string name;           // Ship name
9     string yearBuilt;      // Year it was built
10 public:
11     Ship(string n, string y)
12     {
13         name = n;
14         yearBuilt = y;
15     }
16     string getName()
17     { return name; }
18
19     string getYearBuilt()
20     { return yearBuilt; }
21
22     virtual void print()
23     {
24         cout << "Name: " << name << endl << "Year built: " << yearBuilt <<
25             endl;
26     };
27
28 class CruiseShip : public Ship
29 {
30 private:
31     int passengers;
32 public:
33     CruiseShip(string n, string y, int p) : Ship(n, y)
34     {
35         passengers = p;
36     }
37     virtual void print()
38     {
39         cout << "Name: " << getName() << endl
40             << "Maximum passengers: " << passengers << endl;
41     };
42
43 class CargoShip : public Ship
44 {
45 private:
46     int tonnage;           // Cargo tonnage
47
48 public:
```

```
49     CargoShip(string n, string y, int t) : Ship(n, y)
50     {
51         tonnage = t;
52     }
53
54     // print function
55     virtual void print()
56     {
57         cout << "Name: " << getName() << endl
58             << "Cargo capacity: " << tonnage << " tons"
59             << endl;
60     }
61 };
62
63 int main()
64 {
65     Ship * ships[3] = { new Ship("Lolipop", "1960"),
66                         new CruiseShip("Disney Magic", "1998", 2400),
67                         new CargoShip("Black Pearl", "1800", 50000)
68     };
69
70     for (int index=0; index < 3; index++)
71     {
72         ships[index]->print();
73         cout << "-----\n";
74     }
75
76     return 0;
77 }
```