Selected files

4 printable files

CS5800_HW1\CS5800_Q3\src\com\cpp\cs5800q3\CS5800_Q3.java
CS5800_HW1\CS5800_Q3\src\com\cpp\cs5800q3\Ship.java
CS5800_HW1\CS5800_Q3\src\com\cpp\cs5800q3\CargoShip.java
CS5800_HW1\CS5800_Q3\src\com\cpp\cs5800q3\CruiseShip.java

CS5800_HW1\CS5800_Q3\src\com\cpp\cs5800q3\CS5800_Q3.java

```java
package com.cpp.cs5800q3;

public class CS5800_Q3 {

    public static void main(String[] args) {
        Ship[] ships = new Ship[3];

        ships[0] = new Ship("Ship Brandon", "2025");
        ships[1] = new CruiseShip("Disney Cruise", "2012", 3005);
        ships[2] = new CargoShip("Carry Cargo Ship", "1900", 150000);

        for (Ship s: ships) {
            s.print();
        }

    }

}
```

CS5800_HW1\CS5800_Q3\src\com\cpp\cs5800q3\Ship.java

```java
package com.cpp.cs5800q3;

public class Ship {
    private String name;
    private String year;

```

```java
 7        public Ship(String name, String year) {
 8            this.name = name;
 9            this.year = year;
10        }
11
12        public String getName() {
13            return name;
14        }
15
16        public void setName(String name) {
17            this.name = name;
18        }
19
20        public String getYear() {
21            return year;
22        }
23
24        public void setYear(String year) {
25            this.year = year;
26        }
27
28        public void print() {
29            System.out.println("\nShip name: " + name + " | " + "Year Built: " + year);
30        }
31
32 }
33
```

CS5800_HW1\CS5800_Q3\src\com\cpp\cs5800q3\CargoShip.java

```java
1  package com.cpp.cs5800q3;
2
3  public class CargoShip extends Ship {
4
5      private int cargoCapacity;
6
7      public CargoShip(String name, String year, int cargoCapacity) {
8          super(name, year);
9          this.cargoCapacity = cargoCapacity;
```

```
10          }
11
12          public int getCargoCapacity() {
13              return cargoCapacity;
14          }
15
16          public void setCargoCapacity(int cargoCapacity) {
17              this.cargoCapacity = cargoCapacity;
18          }
19
20          @Override
21          public void print() {
22              System.out.println("Cargo Ship name: " + getName() + " | " + "Cargo Capacity (tonnage): " + cargoCapacity);
23          }
24
25      }
26
27
```

CS5800_HW1\CS5800_Q3\src\com\cpp\cs5800q3\CruiseShip.java

```
1   package com.cpp.cs5800q3;
2
3   public class CruiseShip extends Ship {
4
5       private int maxNumOfPassengers;
6
7       public CruiseShip(String name, String year, int maxNumOfPassengers) {
8           super(name, year);
9           this.maxNumOfPassengers = maxNumOfPassengers;
10      }
11
12      public int getMaxNumOfPassengers() {
13          return maxNumOfPassengers;
14      }
15
16      public void setMaxNumOfPassengers(int maxNumOfPassengers) {
17          this.maxNumOfPassengers = maxNumOfPassengers;
18      }
```

```java
19
20      @Override
21      public void print() {
22          System.out.println("Cruise Ship name: " + getName() + " | " + "Max Num. of Passengers: " + maxNumOfPassengers);
23      }
24
25  }
26
27
```