#include<iostream>

#include<string>

using namespace std;

void choose()

{

int passengers = 0;

cout << "\t\t \t\t\t Type 1 for passenger train \n\n" << endl;

cout << " \t\t\t\t\t Type any key for cargo train \n\n" << endl;

cin >> passengers;

if (passengers == 1) {

cout << " Passangers Train details " << endl;

}

else

{

cout << " Cargo Train Details " << endl;

cout << " write cargo train name " << endl;

}

}

class train {

public:

string trainname;

int yearbuilt;

int choose;

public:

void settrainname(string tan)

{

trainname = tan;

}

void setYear(int y) {

yearbuilt = y;

}

int getYear() {

return yearbuilt;

}

string gettrainname() {

return trainname;

}

train(string tan, int y) {

trainname = tan;

yearbuilt = y;

}

void gettrainData() {

// string trainname, int yearbuilt //

cout << "\t\t\t Wirte Train name: \n\n" << endl;

cin >> trainname;

cout << "\t\t\t Write in which year in which the Train was built : \n\n " << endl;

cin >> yearbuilt;

cout << endl;

}

virtual void print()

{

cout << " The train name is " << trainname << " and it was built in the year " << yearbuilt << ".\n" << endl;

}

};

class passengertrain : public train {

private:

int passengers;

public:

passengertrain(string swn = "", int year = 0, int pass = 0) :train(swn, year)

{

setpassengers(pass);

}

void setpassengers(int pass) {

passengers = pass;

}

int getpassengers() {

return passengers;

}

void getpassanger()// {

/\*

void getpassanger(/ string trainname, int yearbuilt, int passengers / )\*/

{

gettrainData(); // trainname, yearbuilt //

cout << "\t\t\t Write the total number of passengers on the train : \n\n ";

cin >> passengers;

cout << endl;

}

virtual void print() {

cout << " The passanger train name is the " << trainname << " and the maximum number of passengersin the train are " << passengers << ".\n" << endl;

}

};

class bookticket : public passengertrain {

public:

string name;

int seatno;

string place;

void input() {

cout << "\t\t\t Book ticket of Passanger \n\n" << endl;

cin >> name;

cout << "\t\t\t Whichs seat number is given to passanger \n\n" << endl;

cin >> seatno;

cout << "\t\t\t which place you want to go \n\n" << endl;

cin >> place;

}

virtual void print() {

system("color f5");

cout << " The Ticket is book by " << name << " and seat no is " << seatno << "place you are going is " << place << ".\n" << endl;

}

};

class Cargotrain : public train

{

private:

int cargocapacity;

string name;

int package;

public:

Cargotrain(string swn = "", int year = 0, int pass = 0) : train(swn, year) {

setCapacity(pass);

}

void setCapacity(int pass) {

cargocapacity = pass;

}

int getCapacity() {

return cargocapacity;

}

void bookticket() {

cout << " Whats your name " << endl;

cin >> name;

cout << " how much bags you want to send " << endl;

cin >> package;

}

int getCargo( /// string trainname, int yearbuilt, int cargocapacity ///

)

{

gettrainData( // trainname, yearbuilt //

);

system("color f6");

cout << " Write the Total capacity of the train . :" << endl;

cin >> cargocapacity;

cout << endl;

return cargocapacity;

}

virtual void print() {

system("color f5");

cout << " The Cargo train owner name is the " << gettrainname() << " and the total Capacity is " << cargocapacity << " Tonne " << ".\n" << endl;

}

};

class bookticketcargo : public Cargotrain {

public:

string name;

int seatno;

string place;

void input1() {

cout << "\t\t\t Write the Name to Book ticket of Cargo Train \n\n" << endl;

cin >> name;

cout << "\t\t\t Which block number is given to person who cargo \n\n" << endl;

cin >> seatno;

cout << "\t\t\t which place you want to sent \n\n" << endl;

cin >> place;

}

virtual void print() {

system("color f5");

cout << " The Ticket is book by " << name << " and seat no is " << seatno << "place you are going is " << place << ".\n" << endl;

}

};

int main() {

system(" color f6");

string trainname;

int yearbuilt = 0;

int passengers = 0;

int cargocapacity = 0;

int choice;

int exit = 0;

//choose();

train\* t = 0;

//t->gettrainData();

system("color f1");

while (exit != 1) {

cout << "\t\t \t\t\t Type 1 for passenger train \n\n" << endl;

cout << " \t\t\t\t\t Type any key for cargo train \n\n" << endl;

cin >> choice;

if (choice == 1) {

passengertrain pt;

t = &pt;

pt.getpassanger();

pt.print();

system("color 7");

bookticket bt;

bt.input();

bt.print();

system("color D");

}

else {

Cargotrain ct;

t = &ct;

ct.getCargo();

ct.print();

bookticketcargo btc;

btc.input1();

btc.print();

//ct.gettrainData();

//ct.getCargo();

//ct.print();

}

}

}cout << "\n\nPress 1 to exit or press any key to start over\nEnter your choice : ";  
cin >> exit;  
}

system("pause");  
}