**Object oriented programming work**

**Cars Work – Darren Butler**

import java.util.Scanner;

public class carsTest {

public static void main(String[] args) {

Scanner userInput = new Scanner(System.in);

System.out.println("You have 5 cars. Set the specs!");

cars[] carList = new cars[5];

//NEW object made with constructor

cars Ford = new cars("Explorer", 4, "Dunno", 4, "blue");

Ford.aboutCar();

for(cars car: carList){ // class referenceName: arrayName

System.out.println("What is the Model?");

car.setModel(userInput.next());

System.out.println("How many wheels?");

car.setNumberOfWheels(userInput.nextInt());

System.out.println("What type of engine?");

car.setEngine(userInput.next());

System.out.println("How many doors?");

car.setNumberOfDoors(userInput.nextInt());

System.out.println("What color?");

car.setColor(userInput.next());

}

}

}

public class cars {  
 private String model;  
 private int numberOfWheels;  
 private String engine;  
 private int numberOfDoors;  
 private String color;  
  
 //public class name ... This is a class constructor  
 /\* \*/  
 public cars(String model, int numberOfWheels, String engine, int numberOfDoors, String color){  
 this.model = model;  
 this.numberOfWheels = numberOfWheels;  
 this.engine = engine;  
 this.numberOfDoors = numberOfDoors;  
 this.color = color;  
 }  
  
 /\*Print the specifications of the car\*/  
 public void aboutCar(){  
 System.*out*.println("Car specs:");  
 System.*out*.println("The color is" + this.color);  
 }  
  
 void setModel(String model){  
 this.model = model;  
 }//End setModel method  
  
 String getModel(){  
 return this.model;  
 }//End getModel method  
  
 public String getEngine() {  
 return engine;  
 }//End getter for engine  
  
 public void setEngine(String engine) {  
 this.engine = engine;  
 }//End setter for engine  
  
 public void setNumberOfWheels(int numberOfWheels) {  
 this.numberOfWheels = numberOfWheels;  
 }//End setter for number of wheels  
  
 public int getNumberOfDoors() {  
 return numberOfDoors;  
 }//End getter for number of doors  
  
 public void setNumberOfDoors(int numberOfDoors) {  
 this.numberOfDoors = numberOfDoors;  
 }//End setter for number of doors  
  
 public String getColor() {  
 return color;  
 }//End getter for color  
  
 public void setColor(String color) {  
 this.color = color;  
 }//End setter for color  
}

**Bank Account**

package com.company;  
import java.util.Scanner;  
public class Main {  
  
 public static void main(String[] args) {  
 // write your code he  
 Scanner input = new Scanner(System.*in*);  
  
  
  
 Account[] accountList = new Account[5];  
  
 int accountListPosition = 0;  
  
 while (accountListPosition < 5){  
 accountList[accountListPosition] = new Account();  
 System.*out*.println("What is the customer name?");  
 accountList[accountListPosition].setCustomerName(input.next());  
 System.*out*.println("Enter customer phone number");  
 accountList[accountListPosition].setPhoneNumber(input.next());  
 System.*out*.println("Enter starting balance:");  
 accountList[accountListPosition].setBalance(input.nextFloat());  
 System.*out*.println("Enter email:");  
 accountList[accountListPosition].setEmail(input.next());  
  
 accountList[accountListPosition].setAccountNumber(Double.*toString*(100+ accountListPosition));  
  
 System.*out*.println("Account details:");  
 System.*out*.println("-----------------------------------------------------");  
 System.*out*.println("Name: " + accountList[accountListPosition].getCustomerName());  
 System.*out*.println("Account number: " + accountList[accountListPosition].getAccountNumber());  
 System.*out*.println("Phone number: " + accountList[accountListPosition].getPhoneNumber());  
 System.*out*.println("Email: " + accountList[accountListPosition].getEmail());  
 System.*out*.println("Balance: " + accountList[accountListPosition].getBalance());  
 System.*out*.println("-----------------------------------------------------");  
  
  
 ///Finish inforation to be printed out  
  
  
 accountListPosition = accountListPosition + 1;  
 }  
  
 Account bruceWayne = new Account();  
 bruceWayne.setAccountNumber("789456123");  
 bruceWayne.setBalance(100000000);  
 bruceWayne.setCustomerName("Bruce Wanyne ");  
 bruceWayne.setEmail("notbatman@gmail.com");  
 bruceWayne.setPhoneNumber("789-4561");  
  
 System.*out*.println("Account details:");  
 System.*out*.println(bruceWayne.getCustomerName());  
 System.*out*.println( bruceWayne.getAccountNumber());  
 System.*out*.println(bruceWayne.getBalance());  
 System.*out*.println(bruceWayne.getEmail());  
 System.*out*.println(bruceWayne.getPhoneNumber());  
 }  
}

package com.company;  
  
public class Account {  
 private String accountNumber;  
 private String customerName;  
 private float balance;  
 private String email;  
 private String phoneNumber;  
  
 //Withdraws method  
  
 public String getAccountNumber() {  
 return accountNumber;  
 }  
  
 public void setAccountNumber(String accountNumber) {  
 this.accountNumber = accountNumber;  
 }  
  
 public String getCustomerName() {  
 return customerName;  
 }  
  
 public void setCustomerName(String customerName) {  
 this.customerName = customerName;  
 }  
  
 public float getBalance() {  
 return balance;  
 }  
  
 public void setBalance(float balance) {  
 this.balance = balance;  
 }  
  
 public String getEmail() {  
 return email;  
 }  
  
 public void setEmail(String email) {  
 this.email = email;  
 }  
  
 public String getPhoneNumber() {  
 return phoneNumber;  
 }  
  
 public void setPhoneNumber(String phoneNumber) {  
 this.phoneNumber = phoneNumber;  
 }  
}

**Person work**

package com.company;  
  
public class Main {  
  
 public static void main(String[] args) {  
 // write your code here  
 Person person1 = new Person('M', 8, "Mon", "Brown", 5.8, "Baptist",  
 "Bahamian", 2, 2, 2);  
  
 Person person2 = new Person('f', 12, "Mahalia", "Brown", 5.8, "Baptist"  
 , "Bahamian", 2, 2, 2);  
  
 person1.aboutPerson();  
 System.*out*.println("Let's talk about what they like.");  
 person1.likes();  
  
 person1.peopleName();  
 person1.nationalityCheck();  
  
 person2.ageCheck();  
 }  
}

package com.company;  
import java.util.Scanner;  
public class Person {  
 private char gender;  
 private int age;  
 private String Name;  
  
 private String SkinColor;  
 private double height;  
 private String religion;  
 private String Nationality;  
 private int numberofArms;  
 private int numberofLegs;  
 private int numberOfEyes;  
  
 //CONSTRUCTOR  
 public Person(char gender, int age, String Name, String SkinColor, double height,  
 String religion, String Nationality, int numberofArms, int numberofLegs, int numberOfEyes){  
 this.gender = gender;  
 this.age = age;  
 this.Name = Name;  
  
 this.SkinColor = SkinColor;  
 this.height = height;  
 this.religion = religion;  
 this.Nationality = Nationality;  
 this.numberofArms = numberofArms;  
 this.numberOfEyes = numberOfEyes;  
 this.numberofLegs = numberofLegs;  
  
 }//End of person  
  
 public void likes(){  
 String personLikes;  
 Scanner input = new Scanner(System.*in*);  
 System.*out*.println(this.Name + " Likes...");  
 personLikes = input.next();  
 System.*out*.println(personLikes);  
 System.*out*.println(this.Name + " likes " + personLikes + "!");  
  
 }  
 public void aboutPerson(){  
 System.*out*.println("Here's what you should know about " + this.Name);  
 System.*out*.println("Gender " + this.gender);  
 System.*out*.println(ageCheck());  
 System.*out*.println(SkinColorCheck());  
 System.*out*.println("Height: " + this.height);  
 System.*out*.println("Religion: " + this.religion);  
 System.*out*.println("Nationality: " + this.Nationality);  
 System.*out*.println("Number of Legs: " + this.numberofLegs);  
 System.*out*.println("Number of eyes " + this.numberOfEyes);  
 System.*out*.println("Number of arms: " + this.numberofArms);  
 }  
  
 public void peopleName(){  
 if (Name.equalsIgnoreCase("mon")|| Name.equalsIgnoreCase("Mahalia")){  
 System.*out*.println("Mon and Mahalia are friends.");  
 } else {  
 System.*out*.println("They don't know each other.");  
 }// End  
 }///End peopleName  
  
 public void nationalityCheck(){  
 switch (Nationality.toLowerCase()){  
 case "bahamian":  
 System.*out*.println(Name + " is a proud Bahamaian");  
 break;  
 default:  
 System.*out*.print("Bahamian or nuttin!");  
 break;  
 }//End nationality check  
 }//end nationality check method  
  
 public String ageCheck(){  
 if(age >= 10){  
 return (Name + " is a preteen.");  
 } else {  
 return (Name + " is quite young.");  
 }  
 }//end age check  
  
 public String SkinColorCheck(){  
 if (SkinColor.equalsIgnoreCase("brown")){  
 return ("Has brown skin.");  
 } else {  
 return ("Needs a tan.");  
 }  
 }//End Skin color check  
  
}

**Dogs**

package com.company;  
  
import java.util.Scanner;  
  
public class dogsTestRun {  
 public static void main(String[] args) { //MAIN METHOD  
 Scanner in = new Scanner(System.*in*); //Scanner object  
  
 System.*out*.println("How many dogs do you want?");  
 int numberOfDogs = in.nextInt();  
 int dogListLength = numberOfDogs;  
  
 /// Use array to make a list of dog objects  
  
 //Specifies the length of array  
 dogs[] myDogs = new dogs[dogListLength];  
  
 // Dog list position  
 int dogsListPosition = 0; //Starts from first position  
  
 while(dogsListPosition<dogListLength){  
 myDogs[dogsListPosition] = new pitbull();  
 System.*out*.println("What is your new dogs name?");  
 myDogs[dogsListPosition].setName(in.next());  
 System.*out*.println("Your new dogs name is " + myDogs[dogsListPosition].getName());  
 System.*out*.println("This is dog number " + (dogsListPosition + 1));  
  
 //Increment  
 dogsListPosition = dogsListPosition + 1;  
 }//End While Loop  
  
 // Goes through each position in array and prints value  
 for( dogs dog: myDogs){ // class referenceName: arrayName  
 System.*out*.println(dog.getName());  
 System.*out*.println("What is your dog's age?");  
 dog.setAge(3);  
 System.*out*.println("Your dog's age is " + dog.getAge());  
 dogsListPosition++;  
 }  
  
  
 }  
 }//End Main method

package com.company;  
  
  
public class dogs {  
 //Instance variables for dogs superclass  
 private String name;  
 private int age;  
 private String breed;  
 private int weightInPounds;  
  
 public void setName(String name){  
 this.name = name;  
 }//End set name method  
  
 public String getName(){  
 return this.name;  
 }//End get name method  
  
 public void setAge(int age){  
 this.age = age;  
 }//end setAge  
  
 public int getAge(){  
 return this.age;  
 }//end getAge  
  
 public void setBreed(String breed){  
 this.breed = breed;  
 }//End method to set breed  
  
 public String getBreed(){  
 return this.breed;  
 }//End getBreed method  
  
 public void setWeightInPounds(int weightInPounds){  
 this.weightInPounds = weightInPounds;  
 }//End setWeightInPounds method  
  
 public int getWeightInPounds(){  
 return this.weightInPounds;  
 }  
}//End dog class