public class Vehicle {  
  
 // instance variables  
 private static String *regoNumber*;  
 private static double *mileage*;  
 private static String *VehicleType*;  
  
 // constructor  
 public Vehicle()  
 {  
 setRegoNumber("MJX724");  
 setMileage(900.0);  
 setVehicleType("SUV");  
 }  
  
 //getter  
 public static String getRegoNumber()  
 {  
 return *regoNumber*;  
 }  
  
 public static double getMileage()  
 {  
 return *mileage*;  
 }  
  
 public static String getVehicleType()  
 {  
 return *VehicleType*;  
 }  
  
 //setter  
 public boolean setRegoNumber(String newRegoNumber)  
 {  
 boolean flag = false;  
  
 if(newRegoNumber.length() == 6)  
 {  
 *regoNumber* = newRegoNumber;  
 flag = true;  
 }  
 return flag;  
 }  
  
 public boolean setMileage(double newMileage)  
 {  
 boolean flag = false;  
  
 if (newMileage > 0 && newMileage <= 900.0)  
 {  
 *mileage* = newMileage;  
 flag = true;  
 }  
 return flag;  
 }  
  
 public boolean setVehicleType(String newVehicleType)  
 {  
 boolean flag = false;  
  
 if(newVehicleType.equals("SUV") || newVehicleType.equals("Van") || newVehicleType.equals("Sedan") || newVehicleType.equals("Minibus"))  
 {  
 *VehicleType* = newVehicleType;  
 flag = true;  
 }  
 return flag;  
 }  
  
 //toString method  
 public String toString()  
 {  
 String ret = "";  
 ret += "Vehicle: " + *getVehicleType*() + "\n";  
 ret += "Rego Number: " + *getRegoNumber*() + "\n";  
 ret += "Mileage: " + *getMileage*();  
  
 return ret;  
 }  
  
}

public class Trip {  
  
 // instance variables  
 private String tripName;  
 private Vehicle aVehicle;  
 private Date currentDate;  
 private ArrayList destinationList;  
  
  
 // constructor  
 public Trip (String initTripName, Vehicle initAVehicle)  
 {  
 currentDate = new Date();  
 destinationList = new ArrayList<>();  
 setTripName(initTripName);  
 aVehicle = initAVehicle;  
 }  
  
  
 // getter  
 public String getTripName() {  
 return tripName;  
 }  
  
 public Vehicle getAVehicle() {  
 return aVehicle;  
 }  
  
 public Date getCurrentDate() {  
 return currentDate;  
 }  
  
 public ArrayList getDestinationList(){  
 return destinationList;  
 }  
  
 // setter  
 public boolean setTripName(String newTripName)  
 {  
 boolean flag = false;  
 if (newTripName.length() >= 1 && newTripName.length() <= 20)  
 {  
 tripName = newTripName;  
 flag = true;  
 }  
 return flag;  
  
 }  
  
 public boolean setDestinationList(ArrayList newDestinationList){  
 boolean flag = false;  
 if(newDestinationList.size() <= 20){  
 destinationList = newDestinationList;  
 flag = true;  
 }  
 return flag;  
 }  
  
 // other methods  
 public void addVehicle(Vehicle newVehicle) {  
 aVehicle = newVehicle;  
 }  
  
  
  
 public boolean addDestinationByIndex(String destinationLocation, int indexPosition){  
 boolean flag = false;  
 if (destinationLocation != null){  
 destinationList.add(indexPosition,destinationLocation);  
 flag = true;  
 }  
 return flag;  
 }  
  
 public boolean removeDestinationByIndex(int destinationLocationIndex){  
 boolean flag = false;  
 if(destinationList.get(destinationLocationIndex)!= null){  
 destinationList.remove(destinationLocationIndex);  
 flag = true;  
 }  
 return flag;  
 }  
  
 public String toString()  
 {  
 String ret = "";  
 ret += "Trip Name: " + getTripName() + "\n";  
 ret += "Start Date: " + getCurrentDate() + "\n";  
 ret += "Destinations: " + getDestinationList() + "\n";  
 ret += "Vehicle: " + Vehicle.*getVehicleType*() + "\n";  
 ret += "Rego Number: " + Vehicle.*getRegoNumber*() + "\n";  
 ret += "Mileage: " + Vehicle.*getMileage*();  
  
 return ret;  
 }  
}