

# Database Assignment s5014219 Damien Robinson

## Section 1

1. A car has an engine size, transmission, make, model and Vehicle Identification Number. The Vehicle Identification Number of a car is unique.
2. A car must be made by a factory.
3. A factory has a name and a city. The Name of a factory is unique.
4. A car may be sold by a dealer for a price.
5. A dealer has an address, name, email and phone. The address and name of a dealer is unique.
6. A dealer can sponsor a car ad for a cost.
7. A car Ad has a title that is determined by the agency.

## Section 2

### **Factory(Name, City)**

Primary key (PK): {Name}

### **Car(VIN, EngSize, Trans, Make, Model)**

PK: {VIN}

### **Dealer(Address, Name, E-Mail)**

PK: {Address, Name}

### **Car\_Ad(Title, Name)**

PK: {Title},

Foreign key (FK): Name is Name in Agency

### **Agency(Name, Address, Phone)**

PK: {Name}

### **Hybrid(VIN, EngSize, Trans, Make, Model)**

PK: {VIN}

### **Dealer Phone(Address, Name, Phone)**

PK: {Address, Name, Phone},

FK: Address is Address in Dealer, Name is Name in Dealer

### **Sold\_By(VIN, Address, Name, Price)**

PK: {VIN, Address, Name}

FK: VIN is VIN in Car, Address is Address in Dealer, Name is Name in Dealer

### **Sponsors(Title, Address, Name, Cost)**

PK: {Title, Address, Name}

FK: Title is Title in Car\_Ad, Address is Address in Dealer, Name is Name in Dealer

### **Features\_in(Title, VIN, Year)**

PK: {Title, VIN}

FK: Title is Title in Car\_Ad, VIN is VIN in Car

### Section 3

