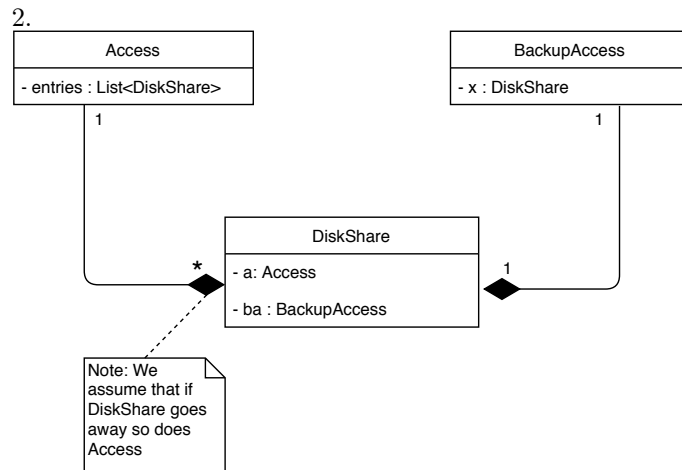
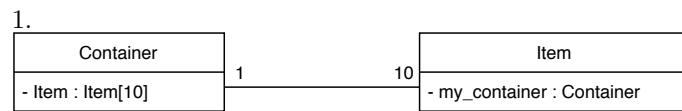


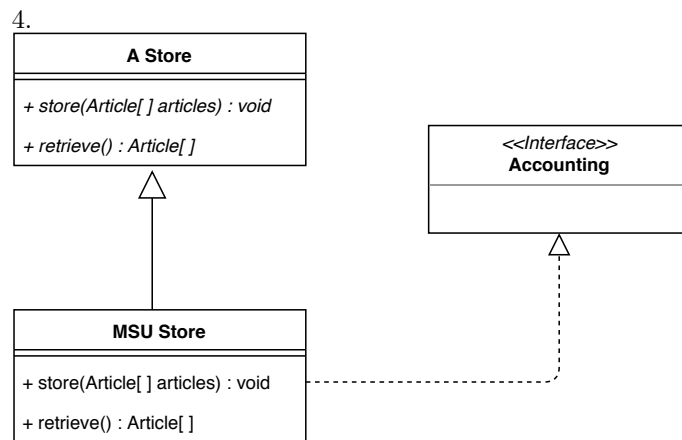
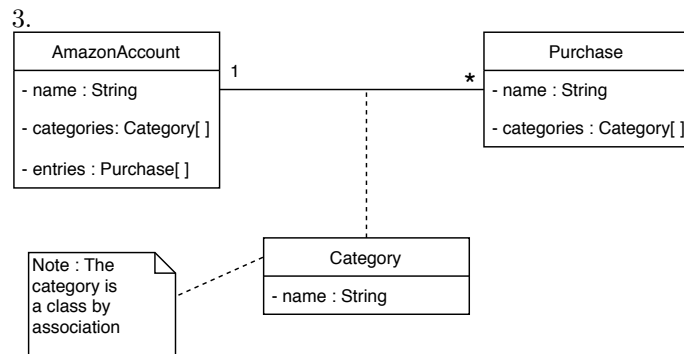
# ESOF-HW1

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## 1 Part A





## 2 Part B

```

public class Company{
//attributes
    public String[1] name;
    public Address[1] headquarters;
    public List<Employee> employee;
    public List<Customer> customer;
    public VehicleRentalService service;
    public List<MotorBike> mortorbike;
    public List<Car> car;
    public List<Truck> truck;
}

public abstract class Person{

```

```

// Attributes
    public String name;
    public String email;
    public Address address;
}

public class Employee extends Person{
}

public class Customer extends Person{
//Attributes
    public BankAccount bankAccount;
}

public class Subcontractor extends Employee{
// Attributes
    public Customer subcontractorCustomer;

//constructor
    public Subcontractor(...)
        super(...);
        this.subcontractorCustomer = new Customer(...);

        // this will allow access to the methods and attributes of a
        // Customer without having to having multiple inheritance.
}

public class Address{
// Attributes
    public String street;
    public String postalCode;
    public String city;
}

public class BankAccount{
// Attributes
    public UnlimitedNatural number;
    public String depositor;
    public String bank;
}

public abstract class Service{
// Attributes
    public Customer customer;
}

```

```

public class VehicleRentalService extends Service{
// Attributes
    public Vehicle vehicle;

//methods
    public void offerCar(){
    }
    public void offerMotorbike(){
    }
    public void offerTruck(){
    }
}

public abstract class Vehicle implements IRentable{
// Attributes
    public UnlimitedNatural power;
    public String manufacturer;
    public String regNo;

}

public class Truck extends Vehicle{
// Attributes
    public UnlimitedNatural weight;
}

public class Car extends Vehicle{
// Attributes
    public CarKind kind;
    public UnlimitedNatural noSeats;
}

public class Motorbike extends Vehicle{
// Attributes
    public MbKind kind;
    public UnlimitedNatural cylinderCap;
}

public interface IRentable{
// Methods
    public rent();
}

```