

School And Student

School

String name
Student list
+ add Student()
+ Show Student()

Aggregation

Student

String name;
Course list;
+ enroll course()
+ Show course()

Association

Course

Course name;
Student list;
+ Add Student
+ Show Student();

University With faculties & Department

University

name
department array list;
faculty list;
+ Add department()
+ Add faculty()
+ Remove department()
+ Remove faculty()
+ Show faculty()
+ Show department()

composition

Department

department name;
display department();

Faculty

Aggregation

name;
Specialization;
display();

Hospital, Doctor & patient

Hospital

Hospital name;
doctor list;
patient list;
+ add doctor();
+ add patient();
+ Showdetails();

Doctor

name;
Specification
patient list;
+ consult();
+ Show
patient();

Associate →

communication

name

doctor list
+ Add doctor();

+ Show doctor();

Patient

Ecommerce

Customer

name;
+ place order();
+ Showorder();

Associate →

Order

product list;
+ Add product();
+ Show product();

product

name;
price;

Aggregation ←

University Management

University

```
+ name;
+ addStudent();
+ addProfessor();
+ addCourse()
  Course: course)
```

Aggregation

professor

```
+ name: String;
+ professorID;
+ teachingCourses;
  Course();
+ assignCourse(
  course);
```

Aggregation

 Student

```
+ name;
+ StudentID;
+ assigned
  course list
+ enrollcourse
  list();
```

Association

course

```
+ course name;
+ course ID
+ Student list;
+ professor list;
```

Library & Book (Aggregation)

Library

```
+ Library name;
+ books: list<Book>
+ add book(book)
+ remove book();
+ Show Book();
```

Aggregation

Book

```
+ title name;
+ author name;
+ displayBook();
```

Bank & Account Holder (Association)

Bank Account Holder

+ name;
+ account number;
+ add Account();

Association

+ name;
+ account list;
+ add Account();
+ display balance();

Association

Account

+ account number;
+ balances;
+ bank;
+ deposits();
+ get balance();

Company Department (Composition)

Company

+ name;
+ department;
+ add department;
+ display();

Composition



Department

+ deptName
+ employee;
+ add Employee;

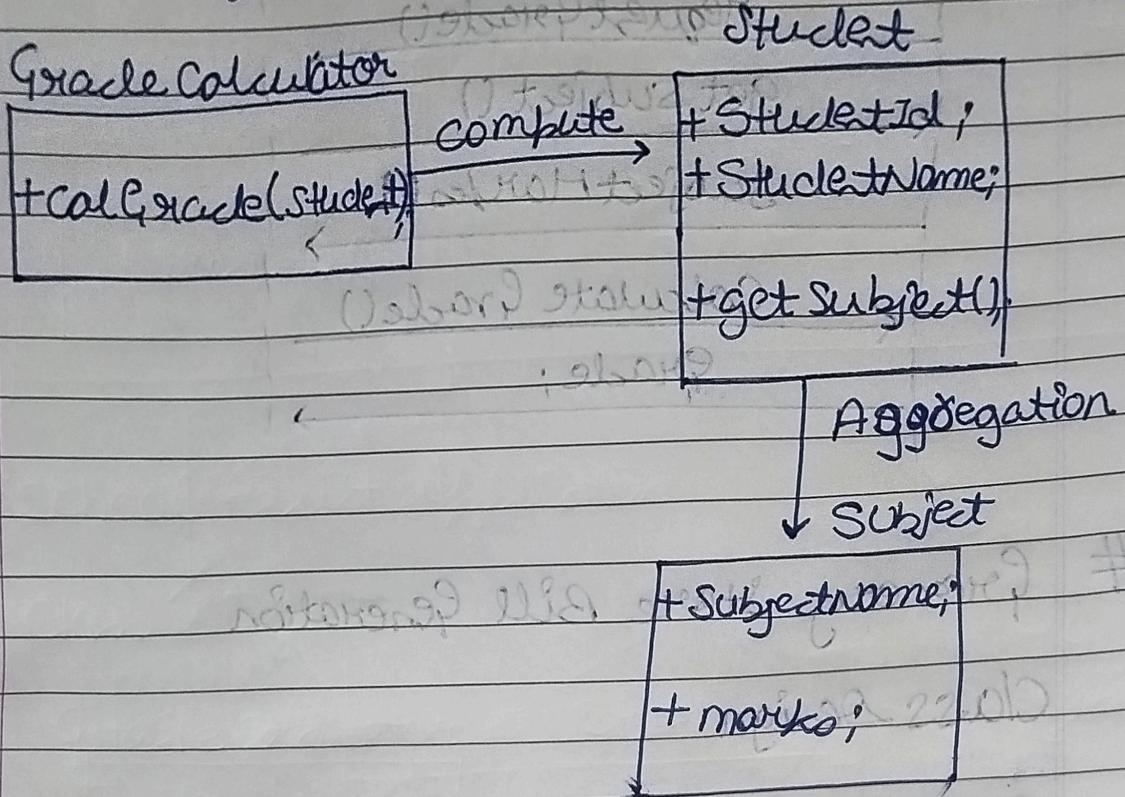
composition

Employee

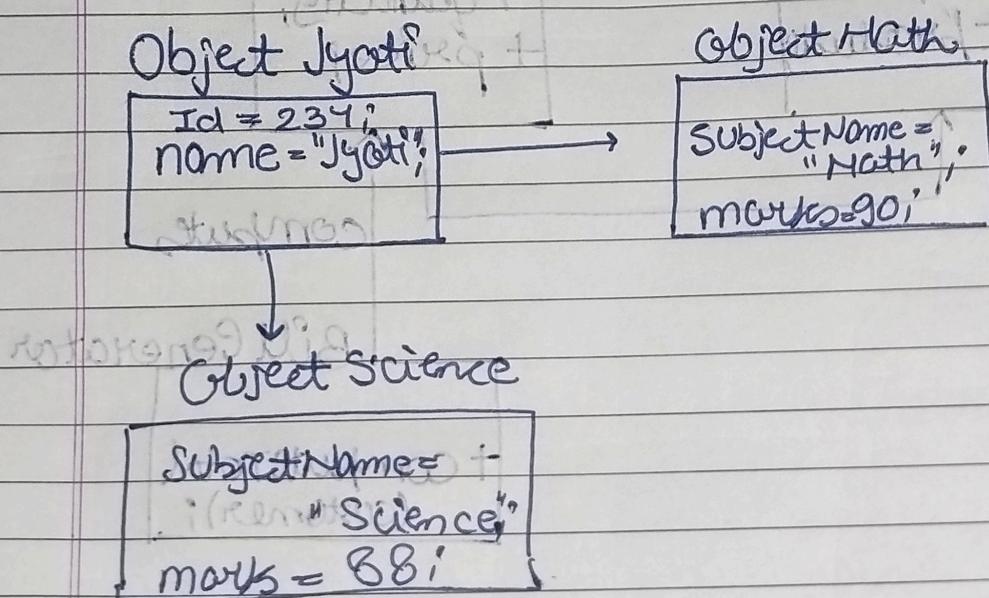
+ Emp ID;
+ Emp Name;

School Result Application

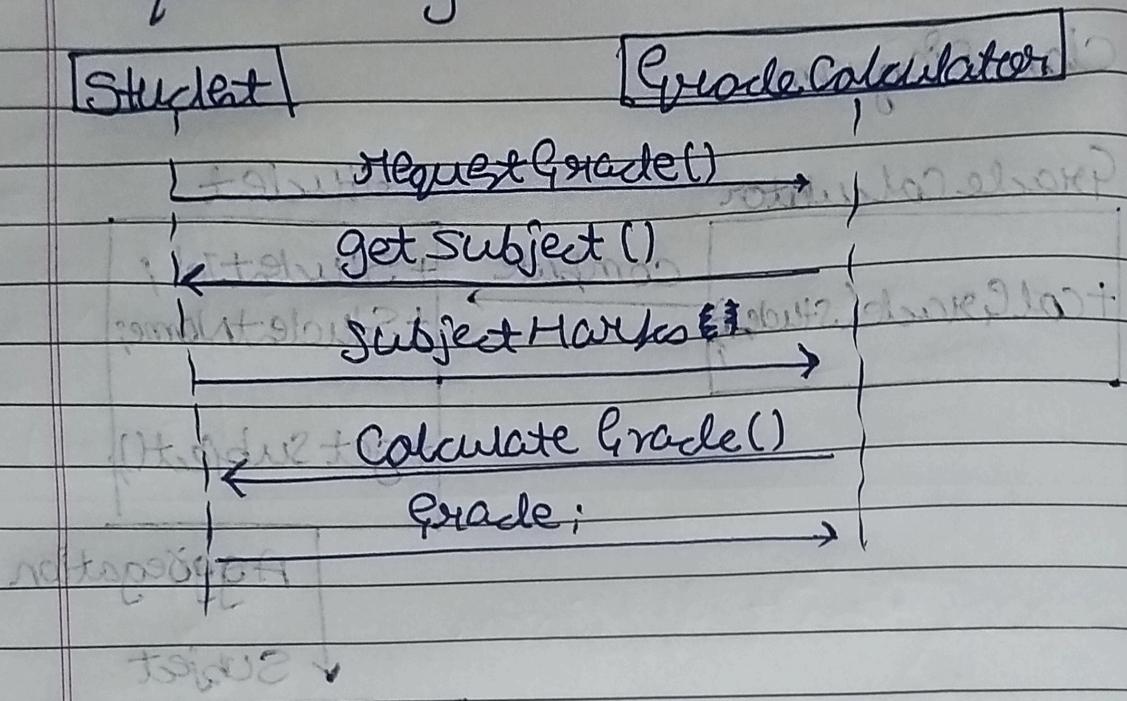
Class Diagram



Object diagram

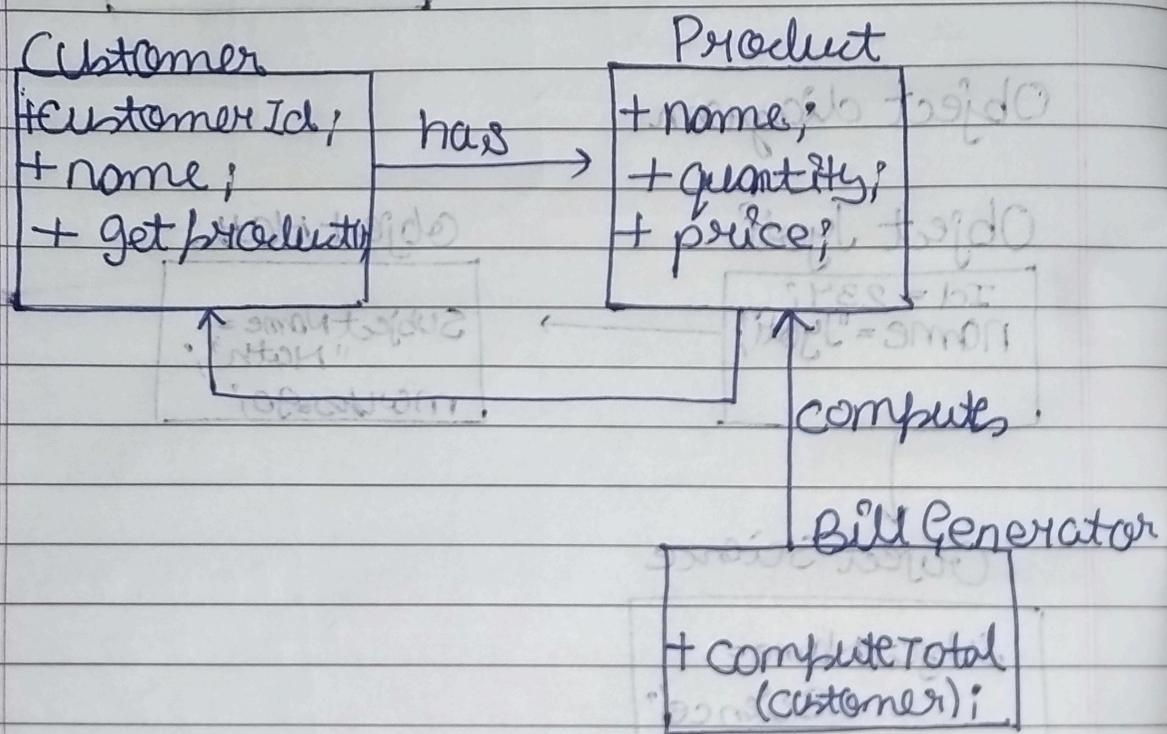


Sequence Diagram

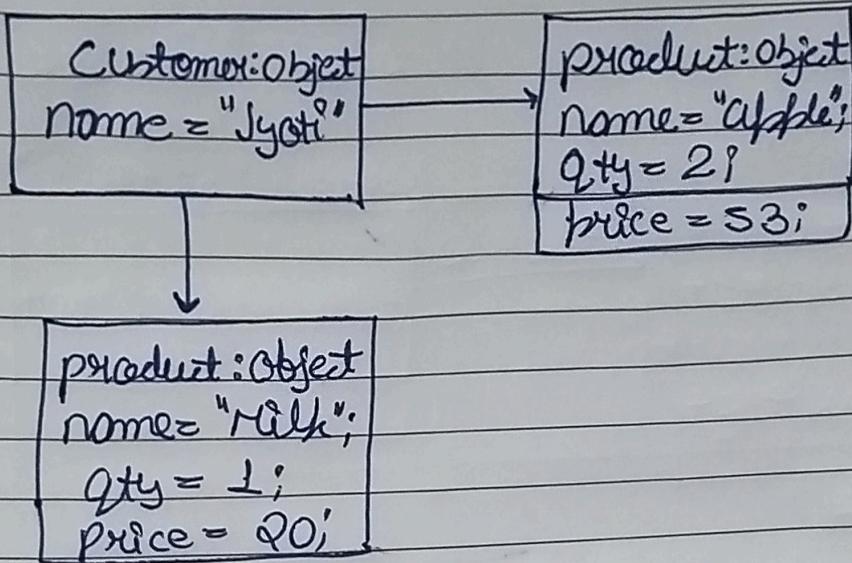


Grocery Store Bill Generation

Class Design



Object Diagram



Sequence Diagram

