

1. **Crate a invoice collection like**

```
{  
  "_id" : A1,  
  "item_name" : "Blue box",  
  "price" : 10,  
  "qty" : 15,  
  "date_of_bill" : "13/04/2015"  
}  
{  
  "_id" : A2,  
  "item_name" : "Light Red box",  
  "price" : 15,  
  "qty" : 20,  
  "date_of_bill" : "05/12/2014"  
}  
{  
  "_id" : null,  
  "item_name" : "Green box",  
  "price" : 10,  
  "qty" : 30,  
  "date_of_bill" : "17/12/2014"  
}  
{  
  "_id" : A3,  
  "item_name" : "White box",  
  "price" : 8,  
  "qty" : 25,  
  "date_of_bill" : "07/02/2014"  
}  
{  
  "_id" : A4,  
  "item_name" : "Blue box",  
  "price" : 15,  
  "qty" : 20,
```

```
"date_of_bill" : "13/04/2015"
}
{
  "_id" : A5,
  "item_name" : "Red box",
  "price" : 12,
  "qty" : 10,
  "date_of_bill" : "05/12/2014"
}
{
  "_id" : A6,
  "item_name" : "Black box",
  "price" : 10,
  "qty" : 30,
  "date_of_bill" : "22/04/2020"
}
{
  "_id" : A7,
  "item_name" : "Red box",
  "price" : 8,
  "qty" : 15,
  "date_of_bill" : "05/12/2014"
}
{
  "_id" : A8,
  "item_name" : "Green box",
  "price" : 20,
  "qty" : 10,
  "date_of_bill" : "17/12/2014"
}
{
  "_id" : A9,
  "item_name" : "Green box",
  "price" : 10,
```

```
"qty" : 30,  
"date_of_bill" : "17/12/2014"  
}
```

Question: Show the bill date and display these fields total price, average quantity, and count the number of bills in the same date.

Question: Get all bill date and item name field and display these fields total price, average quantity, and count the number of bills in the same date.

Question: Get all Bill Date and Item Name fields and display these fields Total Price, Average Quantity, and Count the number of bills in the same date for documents whose bill date is 05/12/2014.

2. Create A Student Collection like :

```
{  
  "_id" : ObjectId("56254d4fdf222265r4g12ds3d65f"),  
  "name" : "Mick",  
  "Course" : "btech",  
  "batch_year" : 2018,  
  "language" : ["c++", "java", "python"],  
  "personal_details" :  
  {  
    "Father_name" : "Jonny",  
    "phone_no" : 8895321456,  
    "age" : 23,  
    "gender" : "Male",  
    "City" : "NewYork",  
  }  
}  
  
{  
  "_id" : ObjectId("56254d4fdf222265r4g12ds3d691"),  
  "name" : "Mick99",
```

```
"Course" : "BCA",
"batch_year" : 2020,
"language" : ["C#", "JavaScript"],
"personal_details" :
{
  "Father_name" : "Henry",
  "phone_no" : 9874563698,
  "age" : 20,
  "gender" : "Female",
  "City" : "London",
}
}
{
  "_id" : ObjectId("56254d4fdf222265r4g12ds3d655"),
  "name" : "Jonny",
  "Course" : "MCALE",
  "batch_year" : 2019,
  "language" : ["C#", "java", "PHP"],
  "personal_details" :
  {
    "Father_name" : "Thomas",
    "phone_no" : 7845123698,
    "age" : 24,
    "gender" : "Male",
    "City" : "London",
  }
}
{
  "_id" : ObjectId("56254d4fdf222265r4g12ds3d678"),
  "name" : "Oliver",
  "Course" : "MCA",
  "batch_year" : 2017,
  "language" : ["c", "PHP"],
  "personal_details" :
```

```

{
  "Father_name" : "William",
  "phone_no" : 9997845123,
  "age" : 25,
  "gender" : "Male",
  "City" : "Liverpool",
}
}
{
  "_id" : ObjectId("56254d4fdf2222265r4g12ds3d665"),
  "name" : "mia",
  "Course" : "btech",
  "batch_year" : 2020,
  "language" : ["HTML", "CSS", "PHP"],
  "personal_details" :
  {
    "Father_name" : "Leo",
    "phone_no" : 6312547896,
    "age" : 22,
    "gender" : "Female",
    "City" : "Manchester",
  }
}

```

Question: Display the details of students who are pursuing B.Tech. using the \$regex operator (i.e. {\$regex : "btech"}) for the course field in the find() method.

Question: Displaying details of students whose name starts with "Mi" using i <options>.
 student.find({name:{\$regex: "Mi",\$options:'i'}}).forEach(printjson)

3. Give a example \$unwind operator on embedded arrays.