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SL1 ASSIGNMENT 16

Problem Statement : Implement the aggregation and indexing with suitable example on above MongoDB database.Demonstrate Following

- Aggregation framework
- Create and drop different types of indexes and explain () to show the advantage of the indexes.

Calculate total amount for each customer id

```
> db.temp.aggregate([{ $match: { status: "A" } }, { $group: { _id: "$cust_id", total: { $sum: "$amount" } } }, { $sort: { total: -1 } }]);
{ "_id" : "A123", "total" : 750 }
{ "_id" : "B212", "total" : 200 }
```

Aggregation (Return Total price per customer)

```
> db.orders.aggregate([
...    { $group: { _id: "$cust_id", value: { $sum: "$price" } } },
...    { $out: "agg_alternative_1" }
... ])
> db.agg_alternative_1.find().sort( { _id: 1 } )
{ "_id" : "Ant O. Knee", "value" : 95 }
{ "_id" : "Busby Bee", "value" : 125 }
{ "_id" : "Cam Elot", "value" : 60 }
{ "_id" : "Don Quis", "value" : 155 }
```

Indexes

```
> db.Orders.createIndex({order_id : 1});
{
      "createdCollectionAutomatically" : false,
      "numIndexesBefore" : 1,
      "numIndexesAfter" : 2,
      "ok" : 1
```

```
}
> db.Orders.getIndexes();
[
      {
            "v" : 2,
            "key" : {
                  "_id" : 1
            },
            "name" : "_id_",
            "ns" : "order_man.Orders"
      },
      {
            "v" : 2,
            "key" : {
                  "order_id" : 1
            },
            "name" : "order_id_1",
            "ns" : "order_man.Orders"
      }
]
> db.Orders.dropIndex({order_id : 1});
{ "nIndexesWas" : 2, "ok" : 1 }
> db.Orders.getIndexes();
[
      {
            "v" : 2,
            "key" : {
                  "_id" : 1
            },
            "name" : "_id_",
            "ns" : "order_man.Orders"
      }
]
```