MongoDB Assignment No.02

Q.1 Create index on sport preferences.

```
db.emp1.createIndex({ "sport preferences": 1 })
{
	"createdCollectionAutomatically" : true,
	"numIndexesBefore" : 1,
	"numIndexesAfter" : 2,
	"ok" : 1
}
```

Q2. Create index on join dates and preferences.

```
db.emp1.createIndex({ "join_date": 1, "preferences": 1 })
{
	"createdCollectionAutomatically" : false,
	"numIndexesBefore" : 2,
	"numIndexesAfter" : 3,
	"ok" : 1
}
```

Q3. Returns user names in upper case and in alphabetical order.

```
db.emp1.aggregate([{$project:{_id:0,name:{$toUpper:"$name"}}},{$sort:{name:1}}])
{ "name" : "DIPAK" }
{ "name" : "DIPALI" }
{ "name" : "VIVEK" }
```

Q4. Returns user names sorted by the month they joined.

```
db.emp1.aggregate([{ $project: {_id: 0, username: 1, joinMonth: { $month: "$joinDate" }}},{ $sort:
{ joinMonth: 1 } }]);
{ "joinMonth" : null }
{ "joinMonth" : null }
```

{ "joinMonth" : null }

{ "username" : "Dipak", "joinMonth" : 1 }

{ "username" : "Dipali", "joinMonth" : 2 }

{ "username" : "Vivek", "joinMonth" : 2 }

Q5. Show how many people joined each month of the year.

```
db.emp1.aggregate([
...  {
...    $project: {
...      _id: 0,
...      username: 1,
...      joinMonth: { $month: "$joinDate" }
...    } },
...  {
...    $group: {
...      _id: "$joinMonth",
...      count: { $sum: 1 }
...    }
...  },
...  {
...    $project: {
...      _id: 0,
...      month: "$_id",
...      count: 1
...    }
...  },
...  { $sort: { month: 1 } }
... ]);
{ "count" : 3, "month" : null }
{ "count" : 1, "month" : 1 }
{ "count" : 2, "month" : 2 }
```