a.1. tya> db.Class.aggregate([{$group: {_id: "$course", StudentCount: {$sum: 1}}}])

```
[
  { _id: 'BScIT', StudentCount: 3 },
  { _id: 'BBI', StudentCount: 1 },
  { _id: 'BAF', StudentCount: 2 }
]
```

a.1. db.Class.aggregate([{$group: {_id: "$course", TotalFees: {$sum: "$fees"}}}])

```
[
  { _id: 'BScIT', TotalFees: 87000 },
  { _id: 'BBI', TotalFees: 19000 },
  { _id: 'BAF', TotalFees: 48000 }
]
```

a.2. tya> db.Class.aggregate([{$group: {_id: "$course", AverageMarks: {$avg: "$marks"}}}])

```
[
  { _id: 'BScIT', AverageMarks: 453.3333333333333 },
  { _id: 'BBI', AverageMarks: 400 },
  { _id: 'BAF', AverageMarks: 485 }
]
```

a.3. tya> db.Class.aggregate([{$group: {_id: "$course", MinimumMarks: {$min: "$marks"}}}])

```
[
  { _id: 'BScIT', MinimumMarks: 420 },
  { _id: 'BBI', MinimumMarks: 400 },
  { _id: 'BAF', MinimumMarks: 420 }
]
```

a.4. tya> db.Class.aggregate([{$group: {_id: "$course", MaximumMarks: {$max: "$marks"}}}])

```
[
  { _id: 'BScIT', MaximumMarks: 490 },
  { _id: 'BBI', MaximumMarks: 400 },
  { _id: 'BAF', MaximumMarks: 550 }
]
```

b.1 tya> db.Class.aggregate([{$group: {_id: "$course", pushFees: {$push: "$fees"}}}])

```
[
  { _id: 'BScIT', pushFees: [ 29000, 29000, 29000 ] },
  { _id: 'BBI', pushFees: [ 19000 ] },
  { _id: 'BAF', pushFees: [ 24000, 24000 ] }
]
```

b.2. tya> db.Class.aggregate([{$group: {_id: "$course", addToSetFees: {$push: "$fees"}}}])

```
[
  { _id: 'BScIT', addToSetFees: [ 29000, 29000, 29000 ] },
  { _id: 'BBI', addToSetFees: [ 19000 ] },
  { _id: 'BAF', addToSetFees: [ 24000, 24000 ] }
]
```

c.1. tya> db.Class.aggregate([{$group: {_id: "$course", firstMarks: {$first: "$marks"}}}])

```
[
  { _id: 'BScIT', firstMarks: 490 },
  { _id: 'BBI', firstMarks: 400 },
  { _id: 'BAF', firstMarks: 420 }
]
```

c.2. tya> db.Class.aggregate([{$group: {_id: "$course", lastMarks: {$last: "$marks"}}}])

```
[
  { _id: 'BScIT', lastMarks: 420 },
  { _id: 'BBI', lastMarks: 400 },
  { _id: 'BAF', lastMarks: 550 }
]
```