```javascript
db.tourist_places.insertOne({
  "tourist_place_id": "TP001",
  "name": "Mysore Palace",
  "state": "KARNATAKA",
  "distance_from_capital": 150,
  "history": "Historical palace in Mysore."
});


db.tourists.insertOne({
  "tourist_id": "T001",
  "name": "John Doe",
  "age": 30,
  "country": "USA",
  "emails": ["john@example.com", "doe@example.com"]
});

db.visits.insertOne({
  "tourist_id": "T001",
  "tourist_place_id": "TP001",
  "visited_date": ISODate("2024-09-01T00:00:00Z")
});
```

Simplified Queries:

a) List the state name which has the maximum number of tourist places.

javascript
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```javascript
db.tourist_places.aggregate([
  { $group: { _id: "$state", count: { $sum: 1 } } },
  { $sort: { count: -1 } },
  { $limit: 1 }
])
```

b) List details of the tourist place where the maximum number of tourists visited.

javascript
Copy code
```javascript
db.visits.aggregate([
  { $group: { _id: "$tourist_place_id", count: { $sum: 1 } } },
  { $sort: { count: -1 } },
  { $limit: 1 }
])
```

c) List the details of tourists who visited all tourist places of the state "KARNATAKA".

```
const totalTouristPlacesInState = db.tourist_places.count({ state:
"KARNATAKA" });

db.visits.aggregate([
  { $lookup: {
    from: "tourist_places",
    localField: "tourist_place_id",
    foreignField: "tourist_place_id",
    as: "place_details"
  }},
  { $match: { "place_details.state": "KARNATAKA" } },
  { $group: { _id: "$tourist_id", visited_places: { $addToSet:
"$tourist_place_id" } } },
  { $match: { "visited_places": { $size: totalTouristPlacesInState }
} },
  { $lookup: {
    from: "tourists",
    localField: "_id",
    foreignField: "tourist_id",
    as: "tourist_details"
  }},
  { $unwind: "$tourist_details" }
])
```

d) Display the details of the tourists who visited at least one tourist place of the state, but visited all states' tourist places.

```
const allStates = db.tourist_places.distinct("state");

db.visits.aggregate([
  { $lookup: {
    from: "tourist_places",
    localField: "tourist_place_id",
    foreignField: "tourist_place_id",
    as: "place_details"
  }},
  { $group: { _id: "$tourist_id", states_visited: { $addToSet:
"$place_details.state" } } },
```

```
  { $match: { states_visited: { $all: allStates } } },
  { $lookup: {
    from: "tourists",
    localField: "_id",
    foreignField: "tourist_id",
    as: "tourist_details"
  }},
  { $unwind: "$tourist_details" }
])
```

e) Display the details of the tourist place visited by tourists from all countries.

```
const allCountries = db.tourists.distinct("country");

db.visits.aggregate([
  { $lookup: {
    from: "tourists",
    localField: "tourist_id",
    foreignField: "tourist_id",
    as: "tourist_details"
  }},
  { $group: { _id: "$tourist_place_id", countries_visited: {
$addToSet: "$tourist_details.country" } } },
  { $match: { countries_visited: { $all: allCountries } } },
  { $lookup: {
    from: "tourist_places",
    localField: "_id",
    foreignField: "tourist_place_id",
    as: "tourist_place_details"
  }},
  { $unwind: "$tourist_place_details" }
])
```