1. школьные экскурсии: тип (развлекательная/образовательная), дисциплины к которым имеет отношение образовательная экскурсия, стоимость с человека, список участников, ответственный за проведение учитель, категории участников экскурсии (участвует, организует, ассистирует при проведении (старшие классы у младших или родители))

а. экскурсии в заповедники (слово заповедник в любом месте названия экскурсии)

б. экскурсии, относящиеся к 2 дисциплинам

в. места, куда нет экскурсий с ассистентами

г. экскурсия, собравшая наименьшее число ассистентов

д. учителя, отвечающие за экскурсии дороже среднего

### ****16. School Excursions:****

* **Type** (entertainment/educational)
* **Subjects** related to the educational excursion
* **Cost per person**
* **List of participants**
* **Teacher responsible** for organizing the excursion
* **Participant categories** (participant, organizer, assistant – senior students assisting younger ones or parents)

#### ****Queries:****

a) **Excursions to nature reserves** (the word "reserve" appears anywhere in the excursion name).  
b) **Excursions related to two subjects**.  
c) **Places where there are no excursions with assistants**.  
d) **Excursion with the fewest assistants**.  
e) **Teachers responsible for excursions that cost more than the average**.

{

"excursions": [

{

"\_id": "1",

"name": "Reserve Forest Educational Trip",

"type": "educational",

"subjects": ["Biology", "Geography"],

"costPerPerson": 20.0,

"participants": [

{

"participantId": "p1",

"role": "participant"

},

{

"participantId": "p2",

"role": "assistant"

},

{

"participantId": "p3",

"role": "participant"

}

],

"teacherId": "t1"

},

{

"\_id": "2",

"name": "City Museum Entertainment Tour",

"type": "entertainment",

"subjects": [],

"costPerPerson": 15.0,

"participants": [

{

"participantId": "p4",

"role": "participant"

},

{

"participantId": "p5",

"role": "participant"

}

],

"teacherId": "t2"

}

],

"participants": [

{

"\_id": "p1",

"name": "Alice",

"category": "participant"

},

{

"\_id": "p2",

"name": "Bob",

"category": "assistant"

},

{

"\_id": "p3",

"name": "Charlie",

"category": "participant"

},

{

"\_id": "p4",

"name": "David",

"category": "participant"

},

{

"\_id": "p5",

"name": "Eve",

"category": "participant"

}

],

"teachers": [

{

"\_id": "t1",

"name": "Mrs. Smith",

"subject": "Biology"

},

{

"\_id": "t2",

"name": "Mr. Johnson",

"subject": "History"

}

]

}

use school\_excursions\_db;

// Create and insert data into the excursions collection

db.excursions.insertMany([

{

"\_id": ObjectId("1"),

"name": "Reserve Forest Educational Trip",

"type": "educational",

"subjects": ["Biology", "Geography"],

"costPerPerson": 20.0,

"participants": [

{ "participantId": "p1", "role": "participant" },

{ "participantId": "p2", "role": "assistant" },

{ "participantId": "p3", "role": "participant" }

],

"teacherId": "t1"

},

{

"\_id": ObjectId("2"),

"name": "City Museum Entertainment Tour",

"type": "entertainment",

"subjects": [],

"costPerPerson": 15.0,

"participants": [

{ "participantId": "p4", "role": "participant" },

{ "participantId": "p5", "role": "participant" }

],

"teacherId": "t2"

}

]);

// Create and insert data into the participants collection

db.participants.insertMany([

{ "\_id": ObjectId("p1"), "name": "Alice", "category": "participant" },

{ "\_id": ObjectId("p2"), "name": "Bob", "category": "assistant" },

{ "\_id": ObjectId("p3"), "name": "Charlie", "category": "participant" },

{ "\_id": ObjectId("p4"), "name": "David", "category": "participant" },

{ "\_id": ObjectId("p5"), "name": "Eve", "category": "participant" }

]);

// Create and insert data into the teachers collection

db.teachers.insertMany([

{ "\_id": ObjectId("t1"), "name": "Mrs. Smith", "subject": "Biology" },

{ "\_id": ObjectId("t2"), "name": "Mr. Johnson", "subject": "History" }

]);

[

{

"excursion\_id": "EX001",

"type": "Educational",

"subjects": ["Biology", "Geography"],

"cost\_per\_person": 20,

"participants": [

{

"name": "John Doe",

"category": "participant"

},

{

"name": "Jane Smith",

"category": "organizer"

},

{

"name": "Mark Brown",

"category": "assistant",

"role": "Senior student assisting younger students"

}

],

"teacher\_responsible": {

"name": "Mr. Stevens",

"contact": "mr.stevens@school.com"

},

"location": "Nature Reserve - XYZ Park"

},

{

"excursion\_id": "EX002",

"type": "Entertainment",

"subjects": ["Art"],

"cost\_per\_person": 15,

"participants": [

{

"name": "Alice Green",

"category": "participant"

},

{

"name": "Tom White",

"category": "organizer"

}

],

"teacher\_responsible": {

"name": "Mrs. Lee",

"contact": "mrs.lee@school.com"

},

"location": "Amusement Park"

},

{

"excursion\_id": "EX003",

"type": "Educational",

"subjects": ["Physics", "Math"],

"cost\_per\_person": 25,

"participants": [

{

"name": "Emily Brown",

"category": "participant"

},

{

"name": "Chris Black",

"category": "assistant",

"role": "Parent"

}

],

"teacher\_responsible": {

"name": "Mr. Johnson",

"contact": "mr.johnson@school.com"

},

"location": "Science Museum"

}

]