

## 2.1. Alive actors whose name starts with “Phi” and did not participate in any movie in 2014

- Pipeline:

```
db.Members.aggregate([
  {
    $match:
    {
      name: {
        $regex: /^Phi/,
      },
      deathyear: null,
    },
  },
  {
    $lookup:
    {
      from: "Movies",
      localField: "_id",
      foreignField: "actors.actor",
      as: "result",
    },
  },
  {
    $match:
    {
      result: {
        $gt: {
          $size: 0,
        },
      },
    },
  },
  {
    $match:
    {
      startyear: {
        $ne: 2014,
      },
    },
  },
])
```

- Results:

	_id	birthyear	deathyear	name	result
1	2015	1951	<null>	Phil Collins	{ "_id": new NumberInt("61437"), "type": "movie", "title": "Cal
2	6573	1930	<null>	Philippe Leroy	{ "_id": new NumberInt("54407"), "type": "movie", "title": "Vug
3	48834	<null>	<null>	Philippa Baker	{ "_id": new NumberInt("71932"), "type": "movie", "title": "Num
4	108984	<null>	<null>	Philippe Brigaud	{ "_id": new NumberInt("72618"), "type": "movie", "title": "Act
5	164385	1941	<null>	Phillip Clark	{ "_id": new NumberInt("72857"), "type": "tvMovie", "title": "Š
6	200057	1958	<null>	Phil Daniels	{ "_id": new NumberInt("68216"), "type": "movie", "title": "Ano
7	289742	<null>	<null>	Philip Frame	{ "_id": new NumberInt("68864"), "type": "movie", "title": "Os
8	296053	1926	<null>	Philip Frost	{ "_id": new NumberInt("33790"), "type": "movie", "title": "Kip
9	309479	<null>	<null>	Philippe Gasté	{ "_id": new NumberInt("70559"), "type": "movie", "title": "Pre
10	378349	1941	<null>	Philip Hepburn	{ "_id": new NumberInt("45578"), "type": "movie", "title": "Bri
11	443158	<null>	<null>	Philip Kay	{ "_id": new NumberInt("37887"), "type": "movie", "title": "Cuo
12	484054	<null>	<null>	Phi Lan	{ "_id": new NumberInt("65838"), "type": "movie", "title": "Sci
13	598340	<null>	<null>	Philippe Monnet	{ "_id": new NumberInt("65536"), "type": "movie", "title": "The
14	608068	<null>	<null>	Philip Morton	{ "_id": new NumberInt("59464"), "type": "movie", "title": "Sea
15	679909	<null>	<null>	Phil Philbin	{ "_id": new NumberInt("65727"), "type": "movie", "title": "Tim
16	680710	<null>	<null>	Phil Phillips	{ "_id": new NumberInt("49336"), "type": "movie", "title": "Hot
17	698413	1940	<null>	Phil Proctor	{ "_id": new NumberInt("75357"), "type": "movie", "title": "Fun
18	787270	<null>	<null>	Philip Shafer	{ "_id": new NumberInt("66818"), "type": "movie", "title": "Bee
19	859365	1949	<null>	Philip Michael Thomas	{ "_id": new NumberInt("74210"), "type": "movie", "title": "Bla

2.2. Producers who have produced more than 50 talk shows in 2017 and whose name contain “Gill”.

- Pipeline:

```

db.Members.aggregate([
  {
    $match: {
      name: {
        $regex: "Gill",
      },
    },
  },
  {
    $lookup: {
      from: "Movies",
      localField: "_id",
      foreignField: "directors",
      as: "result",
    },
  },
  {
    $unwind: {
      path: "$result",
      preserveNullAndEmptyArrays: false,
    },
  },
  {
    $match: {
      "result.startyear": 2017
    },
  },
])

```

```

    },
    {
      $match: {
        result: {
          $gt: {
            $size: 50,
          },
        },
      },
    },
  ],
},
]
])

```

- Results:  
No Matches

2.3. Average runtime for movies that were written by members whose names contain “Bhardwaj” and are still alive.

- Pipeline:

```

• db.Members.aggregate([
  {
    $match: {
      deathyear: null,
      // name : {$regex : "Spielberg"}
      name: {
        $regex: "Bhardwaj",
      },
    },
  },
  {
    $lookup: {
      from: "Movies",
      localField: "_id",
      foreignField: "writers",
      as: "result",
    },
  },
  {
    $match: {
      result: {
        $gt: {
          $size: 0,
        },
      },
    },
  },
  {
    $unwind: {
      path: "$result",
      preserveNullAndEmptyArrays: false,
    },
  },
  {
    $group: {
      _id: null,

```

```

        avgRunTime: {
          $avg: "$result.runtime",
        },
      },
    },
  ],
})

```

- Results:  
No Matches

2.4. Alive producers with the greatest number of long-run movies produced (runtime greater than 120 minutes). Pipeline:

```

• db.Members.aggregate([
  {
    $match: {
      deathyear: null,
    },
  },
  {
    $lookup: {
      from: "Movies",
      localField: "_id",
      foreignField: "producers",
      as: "result",
    },
  },
  {
    $unwind: {
      path: "$result",
      preserveNullAndEmptyArrays: false,
    },
  },
  {
    $match: {
      result: {
        $gt: {
          $size: 0,
        },
      },
    },
  },
  {
    $match: {
      result: {
        $gte: {
          runtime: 120,
        },
      },
    },
  },
])

```