Queries: (These queries are written in a single line in JQuery functions, because to run this on hosted Fuseki on AWS, we needed to have a single line SPARQL queries.)

1) Find the trandate where the frequency of the given hours is greater than 100.

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns%23>
PREFIX owl: <http://www.w3.org/2002/07/owl%23>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema%23>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema%23>
PREFIX sdfc: <http://www.semanticweb.org/jaypatel/ontologies/2022/10/SDFC%23>
SELECT ?tdate ?date ?freq
WHERE{
?trandate a sdfc:TRANDATE .
?trandate sdfc:hasPeopleCount ?peoplecount .
?trandate sdfc:hasDate ?date .
?peoplecount sdfc:hasFreq ?freq .
?trandate sdfc:hasTranDate ?tdate .
FILTER(?freq > 100 )    }
```

2) Find the avg length of stay for the TRANDATE.

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns%23>
PREFIX owl: <http://www.w3.org/2002/07/owl%23>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema%23>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema%23>
PREFIX sdfc: <http://www.semanticweb.org/jaypatel/ontologies/2022/10/SDFC%23>
SELECT ?tdate ?date ?avgstay
WHERE{
?trandate a sdfc:TRANDATE .
?trandate sdfc:hasPeopleCount ?peoplecount .
 ?trandate sdfc:hasDate ?date .
 ?peoplecount sdfc:hasFreq ?freq .
  ?trandate sdfc:hasTranDate ?tdate .
  ?trandate sdfc:hasAvgLenStay ?avgstay . }
```

3) Find the frequency and hour for the given TRANDATE.

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns%23>
PREFIX owl: <http://www.w3.org/2002/07/owl%23>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema%23>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema%23>
PREFIX sdfc: <http://www.semanticweb.org/jaypatel/ontologies/2022/10/SDFC%23>
SELECT ?tdate ?hour ?freq
WHERE{
?trandate a sdfc:TRANDATE .
?trandate sdfc:hasPeopleCount ?peoplecount .
?trandate sdfc:hasDate ?date .
?peoplecount sdfc:hasFreq ?freq .
?trandate sdfc:hasTranDate ?tdate .
?trandate sdfc:hasPeopleCount ?peoplecount .
?peoplecount sdfc:hasFreq ?freq .
?trandate sdfc:hasTranDate ?tdate .
 ?trandate sdfc:hasHour ?hour }
```

4) Find the list of TRANDATE and hours for which the gym is open for a specific TRANDATE.

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns%23>

PREFIX owl: <http://www.w3.org/2002/07/owl%23>

PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema%23>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema%23>

PREFIX sdfc: <http://www.semanticweb.org/jaypatel/ontologies/2022/10/SDFC%23>

SELECT ?trandate ?hours ?open

WHERE{ ?indv a sdfc:TRANDATE .

?indv sdfc:hasTranDate ?trandate .

?indv sdfc:hasHour ?hours .

?indv sdfc:isOpen ?open .

FILTER(?open=True). }
```

5) For the given TRANDATE, find the amount by which prevFreq has grown from prevFreq2.

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns%23>
PREFIX owl: <http://www.w3.org/2002/07/owl%23>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema%23>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema%23>
PREFIX sdfc: <http://www.semanticweb.org/jaypatel/ontologies/2022/10/SDFC%23>
SELECT ?trandate ?prevfrequency ?difference
WHERE{ ?indv a sdfc:TRANDATE .
?indv sdfc:hasTranDate ?trandate .
 ?indv sdfc:hasPeopleCount ?freq .
 ?freq sdfc:hasPrevFreq ?prevfrequency .
 ?freq sdfc:hasPrevFreq2 ?prevfrequency2 .
 BIND(?prevfrequency - ?prevfrequency2 as ?difference) }
```

6) Triplets:

```
SELECT ?subject ?predicate ?object WHERE {?subject ?predicate ?object}LIMIT 25
```