

a.)

If there is a high priority to access data about airports from just their city and state. Then I would make an view or index for each airport, with titles like [Los\_Angelos, California].

```
CREATE VIEW [Los_Angelos,California] AS
```

```
SELECT *
```

```
FROM AIRPORT
```

```
WHERE Airport_Name = "LAX"
```

That way people only need to do SELECT \* FROM [Los\_Angelos, California] to pull all/allowed data from the table.

b.)

If there is a frequent need to find total of salary for mechanics of some airport, then I would make a view for each airport like:

```
CREATE VIEW total_mechanic_salaries_LAX AS
```

```
SELECT SUM(Salary)
```

```
FROM MECHANIC
```

```
WHERE Airport_Name = "LAX"
```

c.)

This would be a situation where a B+Index would work best, because we would want to look on other tables where their information is affected and that kind of recursive nature would probably get the result were looking for.

d.)

Again I think this kind of solution could be solved with a more complex view. Since we want a view for any particular airport we would want one of these indexes for each airport.

```
CREATE VIEW LAX_Mechanics AS
```

```
SELECT MECHANIC.Mechanic_Name, MECHANIC.Telephone, AIRPORT.CITY, AIRPORT.STATE
```

```
FROM MECHANIC
```

```
JOIN AIRPORT ON MECHANIC.Airport_Name = "LAX"
```

That last line could also be MECHANIC.Airport\_Name = AIRPORT.Airport\_Name for any and all display.

e.)

This would be an index for all of the information of the table without having the description in there:

```
CREATE INDEX SKILL_FAST_VIEW  
ON SKILL (Skill_Number, Skill_Name, Skill_Category);
```

That way all can be selected usually for a slower view, but when needed this can be used to access that needed information without the time wasted waiting for the description.