MySQL Select Statements

★ View 1: Active Astronauts

CREATE VIEW active_astronauts AS

SELECT astronautID, name, healthStatus, nationality, missionID, role

FROM astronaut

WHERE healthStatus = 'active';

★ View 2: Active Astronauts with Missions

CREATE VIEW active_astronauts_missions AS

SELECT astronaut.name, astronaut.role, mission.name AS mission_name,

mission.launchDate

FROM astronaut

JOIN mission ON astronaut.missionID = mission.missionID

WHERE mission.status = 'on going';

★ View 3: Mission Experiment Details

CREATE VIEW mission_experiment_details AS

SELECT mission.name AS mission_name, experiment.name AS

experiment_name, experiment.result

FROM mission

JOIN missionexperiment ON mission.missionID =

missionexperiment.missionID

JOIN experiment ON missionexperiment.experimentID =

experiment.experimentID;

★ View 4: Resource Usage Per Spacecraft

```sql
CREATE VIEW resource_usage_per_spacecraft AS
SELECT spacecraft.name AS spacecraft_name,
    SUM(transaction.quantity) AS total_usage,
    resource.type AS resource_type
FROM transaction
JOIN spacecraft ON transaction.spacecraftID = spacecraft.spaceCraftID
JOIN resource ON transaction.resourceID = resource.resourceID
WHERE transaction.type = 'Delivered to Spacecraft'
GROUP BY spacecraft.spaceCraftID, resource.type;
```

★ View 5: Spacecraft Resources Status

```sql
CREATE VIEW spacecraft_resources_status AS
SELECT spaceCraftID, name, status, oxygen, food, power, water,
    CASE WHEN oxygen < 50 THEN 'Oxygen' END AS low_oxygen,
    CASE WHEN food < 50 THEN 'Food' END AS low_food,
    CASE WHEN power < 50 THEN 'Power' END AS low_power,
    CASE WHEN water < 50 THEN 'Water' END AS low_water
FROM spacecraft
WHERE status = 'In Progress';
```

★ View 6: Upcoming Missions

```sql
CREATE VIEW upcoming_missions AS
SELECT name AS mission_name, objective, launchDate
FROM mission
WHERE status = 'planned'
ORDER BY launchDate ASC;
```

★ View 7: Waste Per Spacecraft

```sql
CREATE VIEW wasteperspacecraft AS
SELECT spacecraftID,
    SUM(CASE WHEN type = 'Delivered to Spacecraft' THEN quantity ELSE 0 END) AS total_delivered,
    SUM(CASE WHEN type = 'Returned to Storage' THEN quantity ELSE 0 END) AS total_returned,
    SUM(CASE WHEN type = 'Delivered to Spacecraft' THEN quantity ELSE 0 END) -
    SUM(CASE WHEN type = 'Returned to Storage' THEN quantity ELSE 0 END) AS total_wasted
FROM transaction
GROUP BY spacecraftID;
```