

Queries

-- 1. List all operations with their names and countries

```
SELECT Operation_ID, Operation_Name, Operation_Location_Country FROM OPERATIONS;
```

	Operation_ID	Operation_Name	Operation_Location_Country
▶	OP001	OP-TITAN-001	Spain
	OP002	OP-ONYX-002	USA
	OP003	OP-IRON-003	Kenya
	OP004	OP-ONYX-004	Australia
	OP005	OP-TITAN-005	Kenya
	OP006	OP-PHOENIX-006	Greece
	OP007	OP-COPPER-007	Norway
	OP008	OP-COPPER-008	Brazil
	OP009	OP-FALCON-009	Vietnam
	OP010	OP-COPPER-010	Australia
	OP011	OP-COPPER-011	Vietnam
	OP012	OP-PHOENIX-012	Qatar
	OP013	OP-FALCON-013	Finland
	OP014	OP-TITAN-014	Qatar
	OP015	OP-FALCON-015	Norway
	OP016	OP-TITAN-016	Canada
	OP017	OP-IRON-017	Egypt

OPERATIONS 1 ×

Output ::::::::::::

-- 2. Find all squads that are currently active

```
SELECT Squad_ID, Squad_Name, Squad_Status FROM SQUADS WHERE Squad_Status = 'active';
```

Result Grid		
Squad_ID	Squad_Name	Squad_Status
3000	Squad-Alpha-000	active
3010	Squad-Ghost-010	active
3013	Squad-Titan-013	active
3015	Squad-Bravo-015	active
3026	Squad-Ghost-026	active
3031	Squad-Foxtrot-031	active
3035	Squad-Charlie-035	active
3036	Squad-Ghost-036	active
3043	Squad-Ghost-043	active
3050	Squad-Alpha-050	active
3055	Squad-Bravo-055	active
3064	Squad-Charlie-064	active
3081	Squad-Charlie-081	active
3083	Squad-Viper-083	active
3084	Squad-Titan-084	active
3088	Squad-Echo-088	active
3094	Squad-Bravo-094	active

OPERATIONS 2

SQUADS 3 ×

PERSONNEL 4

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-- 3. Show all personnel currently assigned to any operation

```
SELECT First_Name, Last_Name, Current_Operation_Assigned FROM PERSONNEL WHERE Current_Operation_Assigned IS NOT NULL;
```

	First_Name	Last_Name	Current_Operation_Assigned
▶	Krishna	Taylor	OP229
	Sophia	Johnson	OP039
	Arjun	Thompson	OP286
	Evelyn	Reddy	OP231
	Liam	Singh	OP260
	Oliver	Thompson	OP191
	Kiara	Sharma	OP179
	Noah	Williams	OP251
	Aditi	Martinez	OP145
	Isabella	Martin	OP295
	Saanvi	Patel	OP262
	Sophia	Johnson	OP218
	Kabir	Davis	OP273
	Henry	Banerjee	OP053
	Ava	Mukherjee	OP038
	Meera	Bhat	OP097
	William	Johnson	OP053

-- 4. List all equipment that is damaged

```
SELECT Equipment_ID, Equipment_Name, Equipment_Status FROM EQUIPMENT WHERE Equipment_Status = 'damaged';
```

	Equipment_ID	Equipment_Name	Equipment_Status
▶	1052	ARTILLERY-120mm-Mortar-868	damaged
	1064	SENSOR-Acoustic-305	damaged
	1297	SENSOR-Seismic-237	damaged
	1553	VEHICLE-APC-244	damaged
	1577	COMPUTER-Field-Server-168	damaged
	2126	VEHICLE-Buggy-962	damaged
	2186	ARTILLERY-MLRS-826	damaged
	2258	CBRN-GeigerCounter-905	damaged
	2326	RIFLE-G36-166	damaged
	2681	CBRN-Bio-Detector-271	damaged
	2917	MED_KIT-TraumaKit-267	damaged
	2929	SENSOR-SIGINT-611	damaged
	3036	ENGINEERING-Excavator-719	damaged
	3055	RIFLE-G36-541	damaged
	3072	NAV_SYSTEM-GPS-Unit-318	damaged
	3090	SENSOR-AIS-887	damaged
	3442	UAV-Hexa-Scout-444	damaged

-- 5. Show all operations that have the word "Recon" in their name or nature

```
SELECT Operation_ID, Operation_Name, Operation_Nature  
FROM OPERATIONS  
WHERE Operation_Name LIKE '%Recon%' OR Operation_Nature LIKE  
'%Recon%';
```

51 WHERE Operation_Name LIKE '%Recon%'

Result Grid		
Operation_ID	Operation_Name	Operation_Nature
OP001	OP-TITAN-001	Reconnaissance
OP006	OP-PHOENIX-006	Reconnaissance
OP028	OP-IRON-028	Reconnaissance
OP042	OP-COPPER-042	Reconnaissance
OP049	OP-TITAN-049	Reconnaissance
OP096	OP-TITAN-096	Reconnaissance
OP102	OP-EMBER-102	Reconnaissance
OP143	OP-STEEL-143	Reconnaissance
OP156	OP-COPPER-156	Reconnaissance
OP205	OP-ONYX-205	Reconnaissance
OP212	OP-STEEL-212	Reconnaissance
OP218	OP-TITAN-218	Reconnaissance
OP219	OP-IRON-219	Reconnaissance
OP222	OP-STEEL-222	Reconnaissance
OP252	OP-COPPER-252	Reconnaissance
OP276	OP-IRON-276	Reconnaissance
OP281	OP-STEEL-281	Reconnaissance

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-- 6. Show the total number of squads

```
SELECT COUNT(*) AS Total_Squads FROM SQUADS;
```

Result Grid	
	Total_Squads
▶	300

-- 7. Show the number of personnel in each branch

```
SELECT Branch, COUNT(*) AS Personnel_Count FROM PERSONNEL GROUP BY  
Branch;
```

Result Grid	
Branch	Personnel_Count
▶ Logistics	35
Air Force	42
Army	47
Special Forces	42
Navy	39
Signals	38
Cyber	27
Medical	30

-- 8. Display all operations that started after 2024

```
SELECT Operation_ID, Operation_Name, Operation_Start_DateTime FROM  
OPERATIONS WHERE YEAR(Operation_Start_DateTime) > 2024;
```

Result Grid			
	Operation_ID	Operation_Name	Operation_Start_DateTime
▶	OP183	OP-FALCON-183	2025-01-01 23:00:00
	OP184	OP-TITAN-184	2025-01-03 18:00:00
	OP185	OP-TITAN-185	2025-01-05 19:00:00
	OP186	OP-IRON-186	2025-01-07 18:00:00
	OP187	OP-IRON-187	2025-01-10 00:00:00
	OP188	OP-ONYX-188	2025-01-11 22:00:00
	OP189	OP-PHOENIX-189	2025-01-14 01:00:00
	OP190	OP-COPPER-190	2025-01-16 01:00:00
	OP191	OP-PHOENIX-191	2025-01-18 01:00:00
	OP192	OP-FALCON-192	2025-01-19 07:00:00
	OP193	OP-STEEL-193	2025-01-21 10:00:00
	OP194	OP-STEEL-194	2025-01-24 02:00:00
	OP195	OP-EMBER-195	2025-01-25 22:00:00
	OP196	OP-IRON-196	2025-01-27 19:00:00
	OP197	OP-TITAN-197	2025-01-29 11:00:00
	OP198	OP-IRON-198	2025-02-01 02:00:00
	OP199	OP-ONYX-199	2025-02-02 07:00:00

OPERATIONS 2 SQUADS 3 PERSONNEL 4 EQUIPMENT 5

Output:

-- 9. Find all logistics requests for UAVs

```
SELECT * FROM LOGISTICS WHERE Equipment_Type_Required = 'UAV';
```

Result Grid			
	Operation_ID	Equipment_Type_Required	Equipment_Count
▶	OP192	UAV	86
	OP001	UAV	98
	OP296	UAV	114
	OP043	UAV	107
	OP052	UAV	96
	OP118	UAV	104
	OP163	UAV	40
	OP192	UAV	62
	OP213	UAV	42
	OP143	UAV	68
	OP152	UAV	120
	OP100	UAV	66
	OP204	UAV	39
	OP111	UAV	73
	OP087	UAV	69
	OP011	UAV	106

-- 10. Show all intel reports with a high threat level (>7)

SELECT * FROM INTEL WHERE Threat_Level > 7;

	Intel_ID	Intel_DateTime	Operation_ID	Threat_Level	Intel_Summary
▶	IN301	2024-05-11 16:00:00	OP298	10	High-ground enemy position
	IN302	2024-03-07 05:00:00	OP265	8	Unknown vehicle observed
	IN306	2024-06-13 16:00:00	OP156	9	Unusual radio burst detected
	IN317	2024-04-03 00:00:00	OP043	8	Possible IED indication
	IN319	2024-03-28 13:00:00	OP289	8	Naval contact at range
	IN325	2024-03-07 01:00:00	OP141	10	Unusual radio burst detected
	IN327	2024-01-20 07:00:00	OP200	8	Enemy UAV flying low
	IN331	2024-03-25 18:00:00	OP284	8	High-ground enemy position
	IN332	2024-03-12 00:00:00	OP117	10	Suspicious heat signature
	IN333	2024-06-14 09:00:00	OP098	10	Hostile movement spotted
	IN337	2024-04-11 13:00:00	OP089	8	Unknown vehicle observed
	IN340	2024-03-22 02:00:00	OP183	8	Naval contact at range
	IN343	2024-02-25 07:00:00	OP165	9	Hostile movement spotted
	IN344	2024-02-19 23:00:00	OP111	10	High-ground enemy position
	IN345	2024-04-05 00:00:00	OP062	10	Possible IED indication
	IN346	2024-04-17 02:00:00	OP103	8	Hostile movement spotted
	IN349	2024-04-12 04:00:00	OP074	9	Possible TDF indication

-- 11. List all personnel whose response time is above 20 days

SELECT First_Name, Last_Name, Response_Days FROM PERSONNEL WHERE Response_Days > 20;

	First_Name	Last_Name	Response_Days
▶	Sophia	Johnson	89
	Kabir	Davis	39
	Henry	Banerjee	64
	Noah	Jackson	21
	Liam	Thompson	82
	Saanvi	Rao	62
	Aditya	Smith	44
	Alexander	Gupta	44
	Rudra	Martin	55
	Ira	Khan	33
	Harper	Kapoor	50
	Aditi	Patel	61
	Olivia	Anderson	36
	Ananya	Reddy	72
	Vihaan	Iyer	72
	Benjamin	Brown	66
	Harper	Mukherjee	62

-- 12. Find all squads that have suffered any casualties

```
SELECT Squad_ID, Squad_Name, Squad_Casualties  
FROM SQUADS  
WHERE Squad_Casualties > 0;
```

	Squad_ID	Squad_Name	Squad_Casualties
▶	3000	Squad-Alpha-000	11
	3001	Squad-Ghost-001	4
	3002	Squad-Delta-002	3
	3003	Squad-Viper-003	28
	3004	Squad-Echo-004	18
	3005	Squad-Delta-005	2
	3006	Squad-Charlie-006	12
	3007	Squad-Viper-007	8
	3008	Squad-Ghost-008	12
	3009	Squad-Viper-009	25
	3010	Squad-Ghost-010	15
	3011	Squad-Echo-011	5
	3012	Squad-Ghost-012	2
	3013	Squad-Titan-013	20
	3014	Squad-Echo-014	25
	3015	Squad-Bravo-015	27
	3016	Squad-Ranger-016	8

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-- 13. Count the number of alerts per operation

```
SELECT Operation_ID, COUNT(*) AS Total_Alerts FROM ALERTS GROUP BY  
Operation_ID;
```

| Result Grid | Filter Rows:

	Operation_ID	Total_Alerts
▶	OP009	1
	OP015	1
	OP045	1
	OP053	1
	OP063	1
	OP076	1
	OP099	1
	OP102	1
	OP105	1
	OP109	1
	OP111	2
	OP115	1
	OP125	1
	OP147	1
	OP171	1
	OP186	1
	OP192	1

OPERATIONS 2

SQUADS 3

-- 14. List all operations and their total logistics equipment requested

```
SELECT Operation_ID, SUM(Equipment_Count) AS Total_Equipment_Requested FROM LOGISTICS GROUP BY Operation_ID;
```

Result Grid | Filter Rows:

Operation_ID	Total_Equipment_Requested
OP001	174
OP002	155
OP004	168
OP006	143
OP009	89
OP010	84
OP011	106
OP014	98
OP015	105
OP017	305
OP018	131
OP021	51
OP022	84
OP023	209
OP024	98
OP026	80
OP029	107

-- 15. Find the maximum operation expenditure

```
SELECT MAX(Operation_Expenditure) AS Highest_Expenditure FROM OPERATIONS;
```

Result Grid | Filter

Highest_Expenditure
49807158.54

SubQueries

```
-- 1. Find operations that have higher expenditure than the average expenditure
```

```
SELECT Operation_ID, Operation_Name, Operation_Expenditure  
FROM OPERATIONS  
WHERE Operation_Expenditure > (SELECT AVG(Operation_Expenditure)  
FROM OPERATIONS);
```

	Operation_ID	Operation_Name	Operation_Expenditure
▶	OP001	OP-TITAN-001	48667272.08
	OP002	OP-ONYX-002	30660098.94
	OP004	OP-ONYX-004	27680927.03
	OP005	OP-TITAN-005	26417492.25
	OP006	OP-PHOENIX-006	42783124.21
	OP008	OP-COPPER-008	27438008.16
	OP011	OP-COPPER-011	45393953.12
	OP012	OP-PHOENIX-012	39626851.01
	OP015	OP-FALCON-015	48038332.90
	OP016	OP-TITAN-016	31363778.57
	OP017	OP-IRON-017	29619782.91
	OP018	OP-EMBER-018	27883689.69
	OP019	OP-ONYX-019	49780364.77
	OP022	OP-FALCON-022	34940096.26
	OP024	OP-EMBER-024	44698623.41
	OP025	OP-COPPER-025	32991180.16
	OP026	OP-STEEL-026	34304021.04

```
-- 2. Find squads with a rating above the average rating of all squads
```

```
SELECT Squad_ID, Squad_Name, Squad_Rating  
FROM SQUADS  
WHERE Squad_Rating > (SELECT AVG(Squad_Rating) FROM SQUADS);
```

	Squad_ID	Squad_Name	Squad_Rating
▶	3000	Squad-Alpha-000	78
	3003	Squad-Viper-003	84
	3004	Squad-Echo-004	79
	3005	Squad-Delta-005	92
	3006	Squad-Charlie-006	81
	3009	Squad-Viper-009	97
	3010	Squad-Ghost-010	79
	3011	Squad-Echo-011	99
	3012	Squad-Ghost-012	99
	3016	Squad-Ranger-016	93
	3017	Squad-Charlie-017	95
	3018	Squad-Alpha-018	80
	3019	Squad-Titan-019	88
	3020	Squad-Titan-020	81
	3021	Squad-Ranger-021	84
	3022	Squad-Ghost-022	95
	3023	Squad-Viper-023	77

SQUADS 2 X PERSONNEL 3 EQUIPMENT 4

```
-- 3. Find personnel assigned to the operation with the highest expenditure
```

```
SELECT First_Name, Last_Name, Current_Operation_Assigned  
FROM PERSONNEL  
WHERE Current_Operation_Assigned = (  
    SELECT Operation_ID  
    FROM OPERATIONS  
    ORDER BY Operation_Expenditure DESC  
    LIMIT 1  
);
```

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23 -- 4. Find equipment assigned to the oper

	First_Name	Last_Name	Current_Operation_Assigned
▶	Emma	Brown	OP288
	Oliver	Rodriguez	OP288

```
-- 4. Find equipment assigned to the operation that has the highest
number of alerts
SELECT Equipment_Name, Equipment_Type, Current_Operation_Assigned
FROM EQUIPMENT
WHERE Current_Operation_Assigned = (
    SELECT Operation_ID
    FROM ALERTS
    GROUP BY Operation_ID
    ORDER BY COUNT(*) DESC
    LIMIT 1
);
```

	Equipment_Name	Equipment_Type	Current_Operation_Assigned
▶	NAV_SYSTEM-Map-Tablet-685	nav_system	OP111

```
-- 5. List all squads that are part of the most recently started
operation
SELECT Squad_ID, Squad_Name, Squad_Operation_Assigned
FROM SQUADS
WHERE Squad_Operation_Assigned = (
    SELECT Operation_ID
    FROM OPERATIONS
    ORDER BY Operation_Start_DateTime DESC
    LIMIT 1
);
```

	Squad_ID	Squad_Name	Squad_Operation_Assigned
▶	3186	Squad-Alpha-186	OP300

-- 6. Find all operations located in the same country as the most expensive operation

```
SELECT Operation_ID, Operation_Name, Operation_Location_Country
FROM OPERATIONS
WHERE Operation_Location_Country = (
    SELECT Operation_Location_Country
    FROM OPERATIONS
    ORDER BY Operation_Expenditure DESC
    LIMIT 1
);
```

	Operation_ID	Operation_Name	Operation_Location_Country
▶	OP001	OP-TITAN-001	Spain
	OP047	OP-COPPER-047	Spain
	OP164	OP-ONYX-164	Spain
	OP176	OP-IRON-176	Spain
	OP178	OP-COPPER-178	Spain
	OP244	OP-STEEL-244	Spain
	OP261	OP-IRON-261	Spain
	OP288	OP-TITAN-288	Spain
	OP293	OP-TITAN-293	Spain
*	NULL	NULL	NULL

SQUADS 2 PERSONNEL 3 EQUIPMENT 4 SQUADS 5 OPERATI

```
-- 7. Find all personnel assigned to the operation with the highest threat level
```

```
SELECT First_Name, Last_Name, Current_Operation_Assigned  
FROM PERSONNEL  
WHERE Current_Operation_Assigned = (  
    SELECT Operation_ID  
    FROM INTEL  
    GROUP BY Operation_ID  
    ORDER BY AVG(Threat_Level) DESC  
    LIMIT 1  
);
```

First_Name	Last_Name	Current_Operation_Assigned
Rudra	Perez	OP062

```
- 8. Find operations that have more than 3 logistics requests
```

```
SELECT Operation_ID, COUNT(*) AS Total_Logistics_Items  
FROM LOGISTICS  
GROUP BY Operation_ID  
HAVING COUNT(*) > (  
    SELECT AVG(cnt) FROM (SELECT COUNT(*) AS cnt FROM LOGISTICS GROUP  
    BY Operation_ID) AS avg_log  
);
```

Operation_ID	Total_Logistics_Items
OP001	2
OP002	2
OP004	2
OP006	2
OP017	3
OP018	2
OP022	2
OP023	3
OP026	2
OP036	2
OP042	3
OP043	3
OP044	2
OP050	3
OP051	2
OP053	3
OP054	3

```
-- 9. Find all operations that have above-average alert severity
SELECT DISTINCT Operation_ID
FROM ALERTS
WHERE Operation_ID IN (
    SELECT Operation_ID
    FROM ALERTS
    GROUP BY Operation_ID
    HAVING AVG(Severity) > (SELECT AVG(Severity) FROM ALERTS)
);
```

Result Grid | Filter Row

Operation_ID
OP009
OP015
OP063
OP099
OP102
OP109
OP115
OP125
OP147
OP171
OP229
OP232
OP240
OP289

```
-- 10. Find the squad leader of the most experienced squad
SELECT Squad_Leader, Squad_Experience
FROM SQUADS
WHERE Squad_Experience = (
    SELECT MAX(Squad_Experience) FROM SQUADS
);
```

Result Grid | Filter Rows:

Squad_Leader	Squad_Experience
Aditya Bose	25
Ira Banerjee	25
James Khan	25
Noah Nair	25
Liam Reddy	25
Alexander Martin	25
Emma Miller	25
Aditi Kulkarni	25

```
-- 11. Find all operations that have received any alerts with maximum severity (10)
SELECT Operation_ID, Description, Severity
FROM ALERTS
WHERE Operation_ID IN (
    SELECT DISTINCT Operation_ID
    FROM ALERTS
    WHERE Severity = 10
);
```

Result Grid			
	Operation_ID	Description	Severity
▶	OP232	Weather deterioration	10
	OP063	Drone signal lost	10
	OP099	Enemy movement detected	10

```
-- 12. Find operations where the average threat level is higher than the overall average
SELECT Operation_ID, AVG(Threat_Level) AS Avg_Threat
FROM INTEL
GROUP BY Operation_ID
HAVING AVG(Threat_Level) > (SELECT AVG(Threat_Level) FROM INTEL);
```

Result Grid		
	Operation_ID	Avg_Threat
▶	OP015	7.0000
	OP018	6.0000
	OP026	8.0000
	OP043	8.0000
	OP062	10.0000
	OP065	10.0000
	OP074	9.0000
	OP089	8.0000
	OP097	8.0000
	OP098	10.0000
	OP103	8.0000
	OP105	8.0000
	OP108	10.0000
	OP111	6.0000
	OP117	10.0000
	OP124	6.0000
	OP133	7.0000

```
-- 13. Find the operation(s) that have the most total personnel assigned
SELECT Current_Operation_Assigned AS Operation_ID, COUNT(*) AS Total_Personnel
FROM PERSONNEL
GROUP BY Current_Operation_Assigned
HAVING COUNT(*) = (
    SELECT MAX(PCount)
    FROM (
        SELECT COUNT(*) AS PCount
        FROM PERSONNEL
        GROUP BY Current_Operation_Assigned
    ) AS PersonnelCounts
);

```

Result Grid		Filter Rows:
	Operation_ID	Total_Personnel
▶	OP053	5

```
-- 14. Find all personnel working in operations located in “Urban” habitat areas
SELECT First_Name, Last_Name, Current_Operation_Assigned
FROM PERSONNEL
WHERE Current_Operation_Assigned IN (
    SELECT Operation_ID
    FROM OPERATIONS
    WHERE Operation_Habitat = 'Urban'
);

```

	First_Name	Last_Name	Current_Operation_Assigned
▶	Mia	Mukherjee	OP028
	Sophia	Johnson	OP039
	William	Martin	OP080
	Alexander	Gupta	OP127
	Lucas	Thomas	OP132
	Aditi	Martinez	OP145
	Isabella	Menon	OP146
	Kabir	Anderson	OP152
	Lucas	Jones	OP152
	Noah	Banerjee	OP155
	Henry	Perez	OP174
	Elijah	Jones	OP188
	Arjun	Thompson	OP207
	Zara	Lee	OP207
	Mia	Anderson	OP227
	Ananya	Das	OP275
	Abigail	Bhat	OP275

```
-- 15. List all operations that are located in the same city as
-- "OP005"
SELECT Operation_ID, Operation_Name, Operation_Location_City
FROM OPERATIONS
WHERE Operation_Location_City = (
    SELECT Operation_Location_City
    FROM OPERATIONS
    WHERE Operation_ID = 'OP005'
);
```

Result Grid			
	Operation_ID	Operation_Name	Operation_Location_City
▶	OP005	OP-TITAN-005	Mombasa
	OP111	OP-STEEL-111	Mombasa
	OP171	OP-PHOENIX-171	Mombasa
	OP227	OP-EMBER-227	OP-PHOENIX-171