# HDNB Final Task

(SQL Queries)

**Q1)** Overall Survival Rate:  
   - What percentage of passengers survived?

**Ans:** SELECT  SUM(Survived) \* 100 / count(\*)

FROM `hdnb-final-task.Titanic.Train`

**Q2)** Survival by Passenger Class (Pclass):  
   - What is the survival rate for each passenger class (1st, 2nd, 3rd)?

**Ans:** Select SUM(Survived) \* 100 / COUNT(\*) as Survival\_rate,

        Pclass

From hdnb-final-task.Titanic.Train

GROUP BY Pclass

ORDER BY Survival\_Rate Desc

**Q3)** Survival by Gender (Sex):  
   - What is the survival rate based on gender?

**Ans:** Select Sum(Survived) \* 100 / COUNT(\*) as Survival\_rate,

        Sex

From hdnb-final-task.Titanic.Train

GROUP BY Sex

ORDER BY Survival\_Rate Desc

**Q4)** Fare vs. Survival:  
   - What is the average fare for survivors vs. non-survivors?

**Ans:** Select Case when Survived = 1 Then "Survivor"

        Else "Non-Survivor" End As Passengers,

        Round(avg(Fare)) as Avg\_Fare

From hdnb-final-task.Titanic.Train

Group by Survived

**Q5)** Age vs. Survival:  
   - What is the average age of survivors and non-survivors?

**Ans:** Select Case when Survived = 1 Then "Survivor"

        Else "Non-Survivor" End As Passengers,

        Round(avg(Age)) as Avg\_Age

From hdnb-final-task.Titanic.Train

Group by Survived

**Q6)** Survival by Embarkation Port (Embarked):  
   - What is the survival rate based on the port of embarkation (C = Cherbourg, Q = Queenstown, S = Southampton)?

**Ans:** Select SUM(Survived) \* 100 / COUNT(\*) as Survival\_rate,

        Embarked

From hdnb-final-task.Titanic.Train

GROUP BY Embarked

ORDER BY Survival\_Rate Desc

**Q7)** Family Size vs. Survival (SibSp and Parch):  
   - How does family size (sum of SibSp and Parch) affect survival?

**Ans:** Select (SibSp + Parch) as Family\_size,

        SUM(Survived) \* 100/ Count(\*) as Survival\_rate

From hdnb-final-task.Titanic.Train

Group by Family\_size

Order By Survival\_rate DESC

**Q8)** Top 10 Survivors by Fare Paid:  
   - Who are the top 10 passengers who paid the highest fare and survived?

**Ans:** SELECT ROW\_NUMBER() OVER (ORDER BY Fare DESC) AS Rank,

PassengerId,

Name,

    Fare

FROM hdnb-final-task.Titanic.Train

WHERE

    Survived = 1

ORDER BY Fare DESC

LIMIT 10