

# **BUSINESS INTELLIGENCE HOMEWORK**

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# INTRODUCTION

- ▶ Overview of data/Exploratory Analysis focused on students:

<https://shorturl.at/yFIU8>



- ▶ List of attributes added using the SQL statement **ALTER TABLE**:

**Data\_appello:** Trasformed Dtappello in date format

**Non\_valido:** a binary colum set to 1 if the result of the exam is unknown

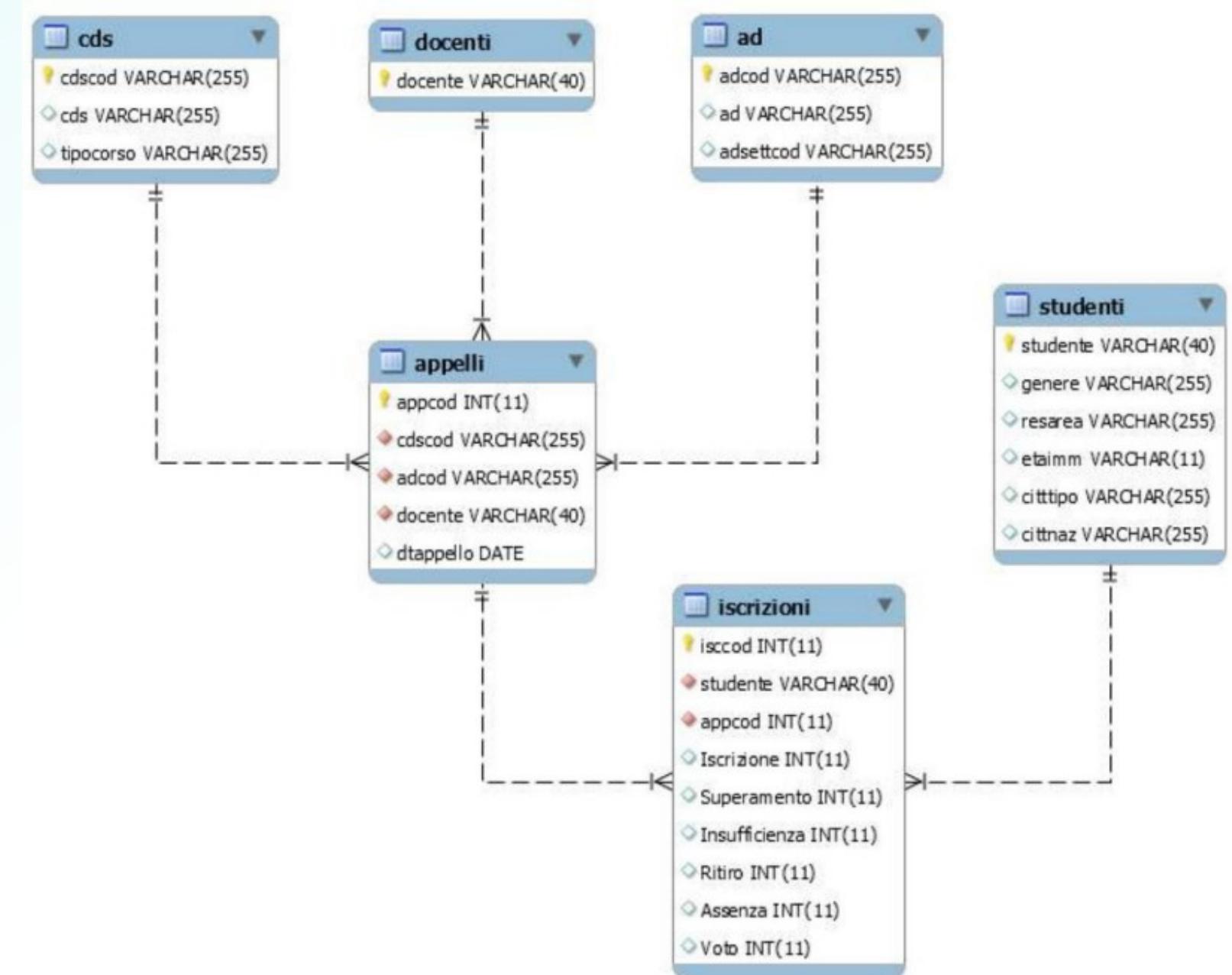
(where “Superamento”, “Insufficenza”, “Ritiro”, “Assenza” are equal to zero)

**Area Disciplinare:** retrieved by E-Learning webpage

# BOS\_DENORMALIZZATO VS NORMALIZZATO

The main difference is that in the "**bos\_denormalizzato**" table all the attributes are collected in a **single table** whereas the **normalizzato**, as illustrated in the figure, consists of **6 tables**. The core table for the relationships is the "**Appelli**" table.

Concerning the queries run, we have chosen to alternately report the ones performed on the 'de\_normalizzato' table and on the normalizzato, given that the **results are identical**. The only difference in the writing of the queries is the substitution of the **FROM clause** based on the specific schema used.



## Query1

# [WHO IS PLAYING?]

Considering the table Appelli, Iscrizioni and Cds, we extracted the subject area, course of study and individual students together with the year using the **SUBTR()** function.

Subsequently, we visualised the data by grouping them according to the same columns.

## TABLES JOINED:

- Appelli
- Iscrizioni
- Cds

```
SELECT
    Area,
    Cds,
    COUNT (DISTINCT studente) AS student_numbers,
    '20' || SUBSTR(DtAppello, -2, 2) AS Anno_appello
FROM appelli a
join iscrizioni i on a.appcod=i.appcod
join cds on a.cdscod= cds.cdscod

GROUP BY
    Cds,
    Annoappello,
    Area

Order by
    Cds,
    Annoappello,
    Area
```

## Query1

### QUERY RESULT

	Area	cds	student_numbers	AnnoAppello
1	SCIENZE DELLA FORMAZIONE	[524] SCIENZE DELL'EDUCAZIONE		1 2017
2	SOCIOLOGICA	[541] SCIENZE DEL TURISMO E COMUNITÀ LOCALE(C.SO A ...		1 2017
3	GIURISPRUDENZA	[581] GIURISPRUDENZA	463	2016
4	GIURISPRUDENZA	[581] GIURISPRUDENZA	1472	2017
5	SCIENZE	[E0201Q] BIOTECNOLOGIE	52	2016
6	SCIENZE	[E0201Q] BIOTECNOLOGIE	440	2017
7	SCIENZE	[E1301Q] SCIENZE BIOLOGICHE	15	2016
8	SCIENZE	[E1301Q] SCIENZE BIOLOGICHE	458	2017
9	GIURISPRUDENZA	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	82	2016
10	GIURISPRUDENZA	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	536	2017
11	SOCIOLOGICA	[E1501N] SCIENZE DEL TURISMO E COMUNITÀ LOCALE	413	2016
12	SOCIOLOGICA	[E1501N] SCIENZE DEL TURISMO E COMUNITÀ LOCALE	483	2017
13	SOCIOLOGICA	[E1502N] SCIENZE DEL TURISMO E COMUNITÀ LOCALE ...	1	2017
14	SOCIOLOGICA	[E1601N] SCIENZE DELL'ORGANIZZAZIONE	347	2016
15	SOCIOLOGICA	[E1601N] SCIENZE DELL'ORGANIZZAZIONE	560	2017



QUERY INFOGRAPHIC: <https://shorturl.at/GIVX2>

## Query2

# [I'LL NEVER GRADUATE]

In our analysis, we conducted five key subqueries to assess exam performance. "**Subquery1**" provided pass and enrollment figures and "**Subquery2**" calculated pass-to-enrollment ratios, both for specific exams. "**Subquery3**" determined average ratios considering exam date intervals. "**Subquery4**" set a minimum limit based on 10% of maximum enrolled students for each CdS and "**Subquery5**" organized results by descending average, selecting the top 10 based on specified conditions.

### TABLES JOINED:

- Appelli
- Iscrizioni
- Cds
- Ad

```
WITH Subquery1 AS (
    SELECT
        ad, data_appello, Cds,
        COUNT(DISTINCT studente) AS total_students_appello,
        SUM(Superamento) AS passed_students_appello
    FROM bos_denormalizzato
    GROUP BY ad, Cds, data_appello
), Subquery2 AS (
    SELECT
        ad, Cds, data_appello, total_students_appello, passed_students_appello,
        CAST(passed_students_appello AS FLOAT) / CAST(total_students_appello AS FLOAT) AS ratio
    FROM Subquery1
    GROUP BY ad, Cds, data_appello
), Subquery3 AS (
    SELECT
        ad, Cds,
        SUM(total_students_appello) AS total_students,
        SUM(passed_students_appello) AS passed_students,
        ROUND(AVG(ratio), 2) AS average
    FROM Subquery2
    GROUP BY ad, Cds
), Subquery4 AS (
    SELECT
        Cds, ad, average, total_students,
        MAX(total_students) OVER (PARTITION BY Cds) * 0.10 AS lower_limit
    FROM Subquery3
), Subquery5 AS (
    SELECT
        ad, Cds, average, total_students,
        ROW_NUMBER() OVER (PARTITION BY Cds ORDER BY average ASC) AS Rank_High,
        lower_limit
    FROM Subquery4
    WHERE total_students >= lower_limit
)
SELECT
    ad, Cds, average, Rank_High
FROM Subquery5
WHERE Rank_High <= 10
ORDER BY Cds;
```

## Query2

### QUERY RESULT

	ad	Cds	average	Rank_High
1	[E1901R086] METODI E TECNICHE DELLA FORMAZIONE MEDIALE	[524] SCIENZE ...	1.0	1
2	[E1501N009] SOCIOLOGIA DELLA CULTURA E DEL TEMPO LIBERO	[541] SCIENZE DEL TURISMO ...	1.0	1
3	[A5810012] DIRITTO TRIBUTARIO	[581] GIURISPRUDENZA	0.34	1
4	[A5810056] DIRITTO FALLIMENTARE	[581] GIURISPRUDENZA	0.37	2
5	[A5810017] DIRITTO PROCESSUALE CIVILE	[581] GIURISPRUDENZA	0.39	3
6	[A5810130] DIRITTO DELL'UNIONE EUROPEA	[581] GIURISPRUDENZA	0.39	4
7	[A5810228] STORIA DEL DIRITTO MEDIEVALE E MODERNO	[581] GIURISPRUDENZA	0.4	5
8	[A5810010] DIRITTO AMMINISTRATIVO	[581] GIURISPRUDENZA	0.41	6
9	[A5810006] FILOSOFIA DEL DIRITTO	[581] GIURISPRUDENZA	0.42	7
10	[A5810003] SCIENZA DELLE FINANZE	[581] GIURISPRUDENZA	0.43	8
11	[A5810042] DIRITTO COSTITUZIONALE EUROPEO ( I DIRITTI ...	[581] GIURISPRUDENZA	0.43	9
12	[A5810227] DIRITTO COSTITUZIONALE	[581] GIURISPRUDENZA	0.43	10
13	[E0201Q059] BIOCHIMICA PER LE BIOTECNOLOGIE	[E0201Q] BIOTECNOLOGIE	0.42	1
14	[E0201Q075] BIOTECNOLOGIE CELLULARI	[E0201Q] BIOTECNOLOGIE	0.43	2
15	[E0201Q001] MATEMATICA	[E0201Q] BIOTECNOLOGIE	0.49	3



QUERY INFOGRAPHIC: <https://shorturl.at/ltwY2>

## Query3

# [COMMITMENT]

Within this subquery, the "daily\_ratio" was calculated as the ratio of the separate count for each combination of data\_appello, CdS, and Ad, and the cumulative sum of these separate counts for all data\_appello.

Next, the average of the daily\_ratio was calculated for each CdS and Area. In this way, the **commitment rate** was determined.

### TABLES JOINED:

- Appelli
- Cds
- Ad

```
WITH subquery AS (
    SELECT
        data_appello,
        Area,
        CdS,
        COUNT(DISTINCT Ad) * 1.0 / SUM(COUNT(DISTINCT Ad)) OVER
    (PARTITION BY data_appello) AS daily_ratio
    FROM bos_denormalizzato
    GROUP BY data_appello, CdS)
SELECT distinct
    Area,
    CdS,
    ROUND(AVG(daily_ratio) OVER (PARTITION BY CdS)* 100,2) AS
    commitment
FROM subquery
ORDER BY commitment DESC;
```

## Query3

### QUERY RESULT

	Area	CdS	commitment
1	GIURISPRUDENZA	[581] GIURISPRUDENZA	21.66
2	PSICOLOGICA	[F5102P] PSICOLOGIA DEI PROCESSI SOCIALI, DECISIONALI E DEI COMPORTAMENTI...	11.97
3	PSICOLOGICA	[E2401P] SCIENZE E TECNICHE PSICOLOGICHE	10.8
4	SCIENZE	[E3501Q] MATEMATICA	9.64
5	PSICOLOGICA	[F5101P] PSICOLOGIA CLINICA, DELLO SVILUPPO E NEUROPSICOLOGIA	9.19
6	SCIENZE	[F1701Q] FISICA	8.68
7	SCIENZE DELLA FORMAZIONE	[G8501R] SCIENZE DELLA FORMAZIONE PRIMARIA	8.62
8	SCIENZE	[E3401Q] SCIENZE E TECNOLOGIE GEOLOGICHE	8.01
9	ECONOMICA-STATISTICA	[H4101D] MEDICINA E CHIRURGIA	7.95
10	SCIENZE	[E2702Q] SCIENZE E TECNOLOGIE CHIMICHE	7.92
11	SCIENZE	[E1301Q] SCIENZE BIOLOGICHE	7.7
12	ECONOMICA-STATISTICA	[E4101B] SCIENZE STATISTICHE ED ECONOMICHE	7.46
13	SCIENZE	[F0601Q] BIOLOGIA	7.4
14	SOCIOLOGICA	[E4001N] SOCIOLOGIA	7.34
15	GIURISPRUDENZA	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	7.21



QUERY INFOGRAPHIC: <https://shorturl.at/tuBFW>

## Query4

# [HARDEST/EASIEST EXAMS]

Two subqueries were performed. The first subquery calculates the **average grade** for a specific exam and course of study, excluding exams with no grade using **WHERE Voto IS NOT NULL**.

The second subquery sorts the exams based on the average grades in ascending and descending order.

The **WHERE** clause was used to select the three rows with the **highest and lowest averages**.

## TABLES JOINED:

- Appelli
- Iscrizioni
- Cds
- Ad

```
WITH Subquery1 AS (
    SELECT
        Cds, AD,
        ROUND(AVG(Voto), 2) AS MediaVoti
    FROM appelli a
    JOIN ad ON a.adcod = ad.adcod
    JOIN cds ON a.cdscod = cds.cdscod
    JOIN iscrizioni i ON a.appcod = i.appcod
    WHERE Voto IS NOT NULL
    GROUP BY Cds, AD
),
Subquery2 AS (
    SELECT Cds, AD, MediaVoti,
        ROW_NUMBER() OVER (PARTITION BY Cds ORDER BY MediaVoti DESC) AS Rank_High,
        ROW_NUMBER() OVER (PARTITION BY Cds ORDER BY MediaVoti ASC) AS Rank_Low
    FROM Subquery1
)
SELECT Cds, AD, MediaVoti
FROM Subquery2
WHERE Rank_High <= 3 OR Rank_Low <= 3;
```

## Query4

### QUERY RESULT

	CdS	AD	MediaVoti
1	[524] SCIENZE DELL'EDUCAZIONE	[E1901R086] METODI E TECNICHE DELLA FORMAZIONE MEDIALE	25.0
2	[541] SCIENZE DEL TURISMO E ...	[E1501N009] SOCIOLOGIA DELLA CULTURA E DEL TEMPO LIBERO	25.0
3	[581] GIURISPRUDENZA	[A5810139] DIRITTO AMMINISTRATIVO -PARTE SPECIALE	30.0
4	[581] GIURISPRUDENZA	[A5810169] EUROPEAN UNION COMMON AND SECURITY DEFENSE POLICY	30.0
5	[581] GIURISPRUDENZA	[A5810170] TRANSITIONAL JUSTICE AND STATE BUILDING	30.0
6	[581] GIURISPRUDENZA	[A5810130] DIRITTO DELL'UNIONE EUROPEA	25.1
7	[581] GIURISPRUDENZA	[A5810001] DIRITTO DEI CONSUMATORI	23.67
8	[581] GIURISPRUDENZA	[A5810081] ECONOMIA AZIENDALE	21.0
9	[E0201Q] BIOTECNOLOGIE	[E0201Q074] BIOFISICA	30.0
10	[E0201Q] BIOTECNOLOGIE	[E0201Q058] CHIMICA FISICA	29.0
11	[E0201Q] BIOTECNOLOGIE	[E0201Q063] BIOCHIMICA CELLULARE	28.36
12	[E0201Q] BIOTECNOLOGIE	[E0201Q059] BIOCHIMICA PER LE BIOTECNOLOGIE	23.41
13	[E0201Q] BIOTECNOLOGIE	[E1301Q059] ECOLOGIA APPLICATA	23.0
14	[E0201Q] BIOTECNOLOGIE	[E0201Q050] METODOLOGIE BIOCHIMICHE E TECNOLOGIE BIOMOLECOLARI	22.63
15	[E1301Q] SCIENZE BIOLOGICHE	[E0201Q046] INFORMATICA	30.0

## Query5

# [FAST & FURIOUS]

We define an "**exam**" as one in which the student is enrolled, with at least one of the dummy columns (superamento, bocciatura, ritiro o assenza) having a value of 1. Traineeships with the sector code 'NN' are excluded, with the exception of those in the medical field, which require registration of the grade. These constraints are specified in the **WHERE** clause.

To address the question, we computed the **rate** as the average of grades in passed exams and the days' difference between the first and last exam, subject to a minimum of **79 days** (median for `exams_taken=2`).

### TABLES JOINED:

- Appelli
- Iscrizioni
- Cds
- Ad

```
WITH Subquery1 AS (
    SELECT
        studente, Cds, Data_appello, voto,
        (SUM(iscrizione) OVER (PARTITION BY studente)) AS n_appelli_svolti
    FROM bos_denormalizzato
    WHERE
        Non_valido = 0 AND (AdSettCod <> 'NN' OR (AD NOT LIKE
        '%tirocinio%' OR AD LIKE '%E3901N023%'))
), Subquery2 AS (
    SELECT
        Cds, studente, n_appelli_svolti,
        MIN(Data_appello) AS data_primo_appello,
        MAX(Data_appello) AS data_ultimo_appello,
        AVG(voto) AS votazione_media
    FROM Subquery1
    GROUP BY studente, Cds
), Subquery3 AS (
    SELECT
        Cds, studente, votazione_media, n_appelli_svolti,
        (julianday(data_ultimo_appello) - julianday(data_primo_appello)) as diff_giorni
    FROM Subquery2
)
SELECT
    Cds, studente, (votazione_media) / (diff_giorni) as rate
FROM Subquery3
GROUP BY studente
HAVING diff_giorni >= 79
ORDER BY rate DESC
```

## Query5

### QUERY RESULT

	Cds	studente	rate
1	[F7501Q] SCIENZE E TECNOLOGIE PER L'AMBIENTE E IL TERRITORIO	3D670A080BF10F03DD01976C9F...	0.38
2	[F5301Q] SCIENZA DEI MATERIALI	605D0CB9DC4548DD05C79E0E6...	0.38
3	[581] GIURISPRUDENZA	2E647E8DD06E7B326F85743AC5...	0.37
4	[E1301Q] SCIENZE BIOLOGICHE	33785D831F70E1BA91FAAC3865...	0.37
5	[E1601N] SCIENZE DELL'ORGANIZZAZIONE	BA0CD13AC8E9D7687266CA938...	0.37
6	[E2001R] COMUNICAZIONE INTERCULTURALE	C8556831C73223E46030C57D0A...	0.37
7	[F7501Q] SCIENZE E TECNOLOGIE PER L'AMBIENTE E IL TERRITORIO	016489F40305A53368136CF8754...	0.36
8	[E1801M] MARKETING, COMUNICAZIONE AZIENDALE E MERCATI GLOBALI	14FB50DE27F74B5E46715C56EA...	0.36
9	[E4102B] STATISTICA E GESTIONE DELLE INFORMAZIONI	447FF52080F569EB4CE1816876A...	0.36
10	[G8501R] SCIENZE DELLA FORMAZIONE PRIMARIA	52716654F903932F30EBC5CDD9...	0.36
11	[F7701M] SCIENZE ECONOMICO-AZIENDALI	64A52A7C5BB8C8291E15E8172D...	0.36
12	[E1801M] MARKETING, COMUNICAZIONE AZIENDALE E MERCATI GLOBALI	666D226005207889D825261941...	0.36
13	[F1801Q] INFORMATICA	8775013BCD05B4C41F39D99F57...	0.36
14	[G8501R] SCIENZE DELLA FORMAZIONE PRIMARIA	CBEF5C35CF27031E5B5645C3CA...	0.36
15	[G8501R] SCIENZE DELLA FORMAZIONE PRIMARIA	F17DCFC68EFA77CAC49599186A...	0.36



QUERY INFOGRAPHIC: [https://t.ly/LPN\\_p](https://t.ly/LPN_p)

## Query6

# [TRIAL & ERROR]

Three subqueries were performed. The first one calculates the number of **trials** a certain student did before passing a particular exam, using the fact that there are only 0 or 1 in Insufficienza or Superamento, with also a condition to exclude students who never actually passed that exam, i.e.  $\text{SUM}(\text{SUPERAMENTO}) > 0$ .

In the second one the **average of trials** among students is calculated.

In the third one exams are sorted by the number of attempts averages in decreasing order.

Finally **WHERE** is used to obtain the **top-3**.

### TABLES JOINED:

- Appelli
- Iscrizioni
- Cds
- Ad

```
WITH Subquery1 AS (
    SELECT
        CdS, Ad, Studente,
        SUM(Insufficienza) + SUM(Superamento) AS TotalAttempts
    FROM appelli a
        JOIN ad ON a.adcod = ad.adcod
        JOIN cds ON a.cdscod = cds.cdscod
        JOIN iscrizioni i ON a.appcod = i.appcod
    GROUP BY
        CdS, Ad, Studente
    HAVING SUM(Superamento) > 0
), Subquery2 AS (
    SELECT
        CdS, Ad,
        ROUND(AVG(TotalAttempts), 2) AS AvgAttempts
    FROM Subquery1
    GROUP BY CdS, Ad
), Subquery3 AS (
    SELECT
        CdS, Ad, AvgAttempts,
        ROW_NUMBER() OVER (PARTITION BY CdS ORDER BY AvgAttempts DESC)
    AS Rank
    FROM Subquery2
)
SELECT
    CdS, Ad, AvgAttempts
FROM Subquery3
WHERE Rank <= 3;
```

## Query6

### QUERY RESULT:

	CdS	Ad	AvgAttempts
1	[524] SCIENZE DELL'EDUCAZIONE	[E1901R086] METODI E TECNICHE DELLA FORMAZIONE MEDIALE	1.0
2	[541] SCIENZE DEL TURISMO E ...	[E1501N009] SOCIOLOGIA DELLA CULTURA E DEL TEMPO LIBERO	1.0
3	[581] GIURISPRUDENZA	[A5810081] ECONOMIA AZIENDALE	1.2
4	[581] GIURISPRUDENZA	[A5810129] DIRITTO DELLA NAVIGAZIONE	1.13
5	[581] GIURISPRUDENZA	[A5810006] FILOSOFIA DEL DIRITTO	1.1
6	[E0201Q] BIOTECNOLOGIE	[E0201Q001] MATEMATICA	1.45
7	[E0201Q] BIOTECNOLOGIE	[E0201Q059] BIOCHIMICA PER LE BIOTECNOLOGIE	1.34
8	[E0201Q] BIOTECNOLOGIE	[E0201Q053] ORGANI E FUNZIONI	1.2
9	[E1301Q] SCIENZE BIOLOGICHE	[E1301Q009] CHIMICA GENERALE	1.54
10	[E1301Q] SCIENZE BIOLOGICHE	[E1301Q011] ZOOLOGIA	1.53
11	[E1301Q] SCIENZE BIOLOGICHE	[E0201Q065] BIOCHIMICA SISTEMATICA UMANA	1.5
12	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	[E1401A072] SEMINARIO IUS/16-/17- MED/43	1.36
13	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	[E1401A015] ECONOMIA AZIENDALE	1.25
14	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	[E1401A082] POLITICA ECONOMICA	1.13
15	[E1501N] SCIENZE DEL TURISMO E ...	[E1801M053] LINGUA - TEDESCO	2.0

## Query7

# [DEMANDING TEACHERS]

### Extended request:

[For each course of study, find the top-3 of the most demanding teachers, i.e. the teachers with the highest ratio between number of failures or withdrawals in exams and the total number of exams that were passed, failed or withdrawn from]

Two subqueries were performed. In the first one, for each course of study and teacher the number of students that had that teacher (**NumStudents**) was counted, considering only the cases where students either passed the exam, failed the exam or decided to withdraw from it.

Then for each of these cases **InsufficiencyRate** was calculated as the ratio indicated above.

Using **HAVING** we selected for this calculation only cases where **NumStudents** was at least 10.

In the second subquery teachers were ordered by decreasing **InsufficiencyRate**.

Finally **WHERE** was used to get the **top-3**.

### TABLES JOINED:

- Appelli
- Iscrizioni
- Cds

```
WITH Subquery1 AS (
    SELECT
        CdS, Docente,
        COUNT( CASE WHEN Iscrizione = 1 AND (Superamento = 1 OR
Ritiro = 1 OR Insufficienza = 1) THEN Studente END) AS NumStudents,
        ROUND((SUM(Insufficienza) + SUM(Ritiro)) * 1.0) /
        (SUM(Superamento + Insufficienza + Ritiro)),2) AS InsufficiencyRate
    FROM appelli a
    JOIN cds on a.cdscod = cds.cdscod
    JOIN iscrizioni i ON a.appcod = i.appcod
    GROUP BY CdS, Docente
    HAVING NumStudents >= 10
), Subquery2 AS (
    SELECT
        CdS, Docente, NumStudents, InsufficiencyRate,
        ROW_NUMBER() OVER (PARTITION BY CdS ORDER BY
        InsufficiencyRate DESC) AS RowNum
    FROM Subquery1
)
SELECT
    CdS, Docente, InsufficiencyRate
FROM Subquery2
WHERE RowNum <= 3;
```

## Query7

### QUERY RESULT:

	CdS	Docente	InsufficiencyRate
1	[581] GIURISPRUDENZA	E832EFFBC5D114ED1C4DE71C3C01979E9F07E058	0.35
2	[581] GIURISPRUDENZA	A0C6A79D254BA14B489223AE182D5D5646FB1240	0.32
3	[581] GIURISPRUDENZA	B5FA448537286E814DF6568F3155543D91F0ED37	0.29
4	[E0201Q] BIOTECNOLOGIE	9D2CF4E3617BFD98A95AD48B665B1CE6D36AAC37	0.43
5	[E0201Q] BIOTECNOLOGIE	2AD7B9DD8D5E0D2929384D2B6636D3A570C029...	0.42
6	[E0201Q] BIOTECNOLOGIE	A47063E7B4060D292F26F367EF613BC603ABD609	0.39
7	[E1301Q] SCIENZE BIOLOGICHE	0D9A76EF3BE71F9DC4798778D8D79FEE58EEF61C	0.52
8	[E1301Q] SCIENZE BIOLOGICHE	AA8D986ECD8EFAE48F68F0A69C8AC8D2EF621F6F	0.47
9	[E1301Q] SCIENZE BIOLOGICHE	08C3A56D2D2C6ED3295277E835461A7664F2033A	0.43
10	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	5B4F9AB54575BD3BEB0720BE2D2C0AFE0246AA81	0.42
11	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	56C8B15F16D5533B4F12B26A58D622640CA8FADF	0.35
12	[E1401A] SCIENZE DEI SERVIZI GIURIDICI	3CD8F060987B0C192B1034764D012B898AD22D4A	0.29
13	[E1501N] SCIENZE DEL TURISMO E COMUNITÀ LOCALE	7CF6DEC61AE5027D0E2D8B42FA32F63A2E0D4A68	0.52
14	[E1501N] SCIENZE DEL TURISMO E COMUNITÀ LOCALE	B79BA3667A096814FF3B8E46EC50ADB10A4BFBB2	0.3
15	[E1501N] SCIENZE DEL TURISMO E COMUNITÀ LOCALE	90FBDCD14BD512322F54CB7A32FDC6FA37C89BA	0.26

# THANKS!

