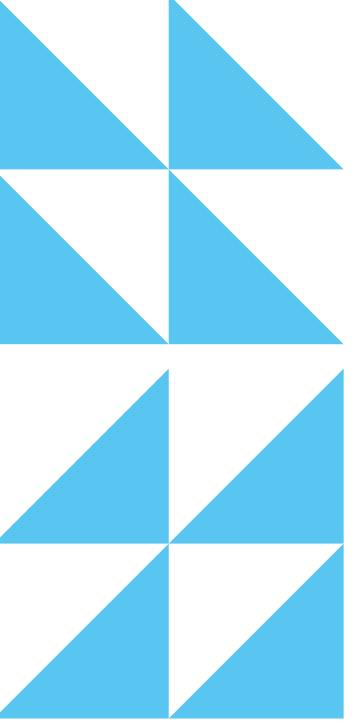


SISTEMI I MENAXHIMIT TË PERFORMANCES AKADEMIKE

By Kristi Spahi



PËRMBAJTJA

- Çfarë synohet të arrihet përmes këtij projekti?
- Insertimi i të dhënave në tabelë"
- Diagrami Er Skema Relacionale
- Analiza e të dhënave të ndryshme nëpërmjet kërkesave.
- Krijimi i bazës së të dhënave
- Krijimi i tabelave
- Vizualizimi i të dhënave
- Përfundimi



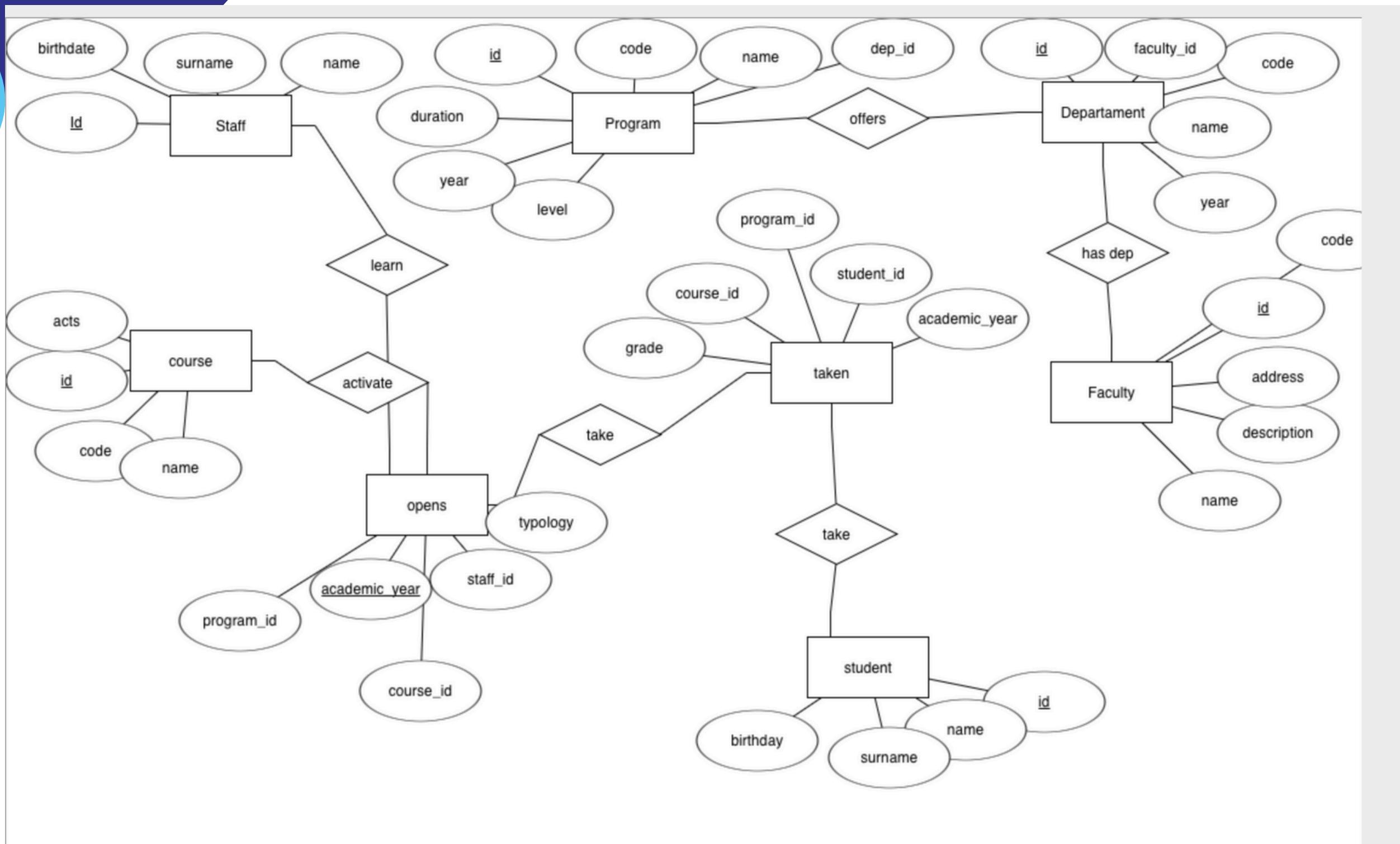
ÇFARË SYNON KY PROJEKT?

- Monitorimi i Performancës Studentore: Duke analizuar notat dhe regjistrimet në programe të ndryshme, projekti ndihmon për të identifikuar sfidat akademike dhe për të ndjekur suksesin e studentëve.
 - Vlerësimi i Popullaritetit të Programeve: Për të ndjekur trendet e regjistimeve sipas programeve dhe viteve akademike, duke identifikuar cilat programe janë më të kërkuara dhe tërheqin më shumë studentë.

- Krahasimi i Performancës Ndërmjet Programeve: Për të matur performancën mesatare të studentëve
- Diversiteti dhe Demografia e Fakultetit dhe Studentëve: Për të ofruar informacion mbi ndarjen gjinore dhe moshën mesatare të stafit dhe studentëve, duke ndihmuar universitetin të planifikojë më mirë burimet dhe zhvillimin e stafit.

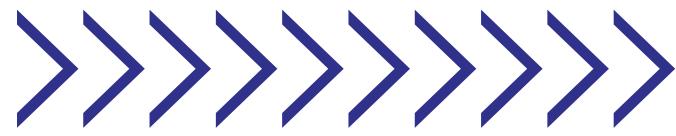
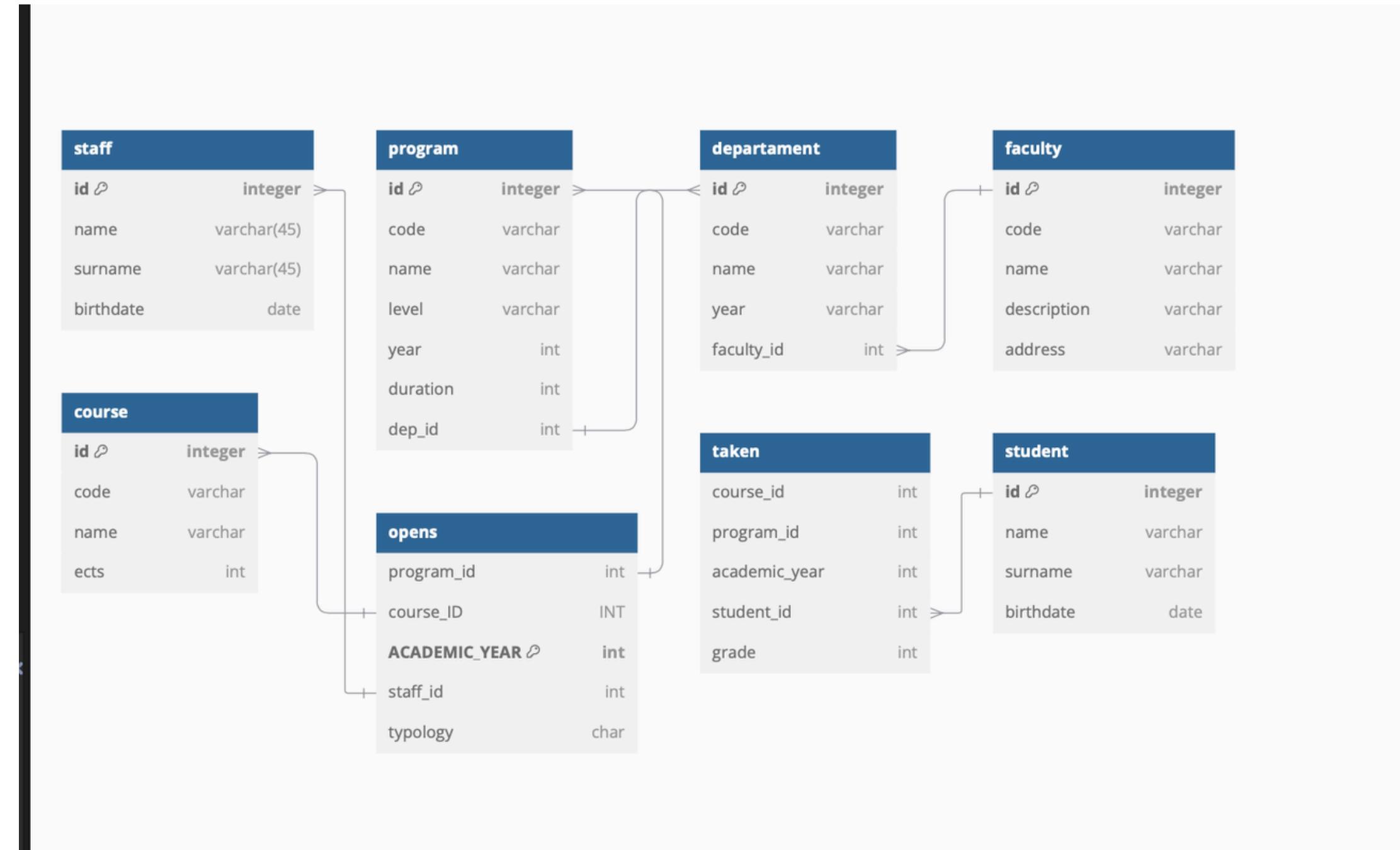


SKEMA ER



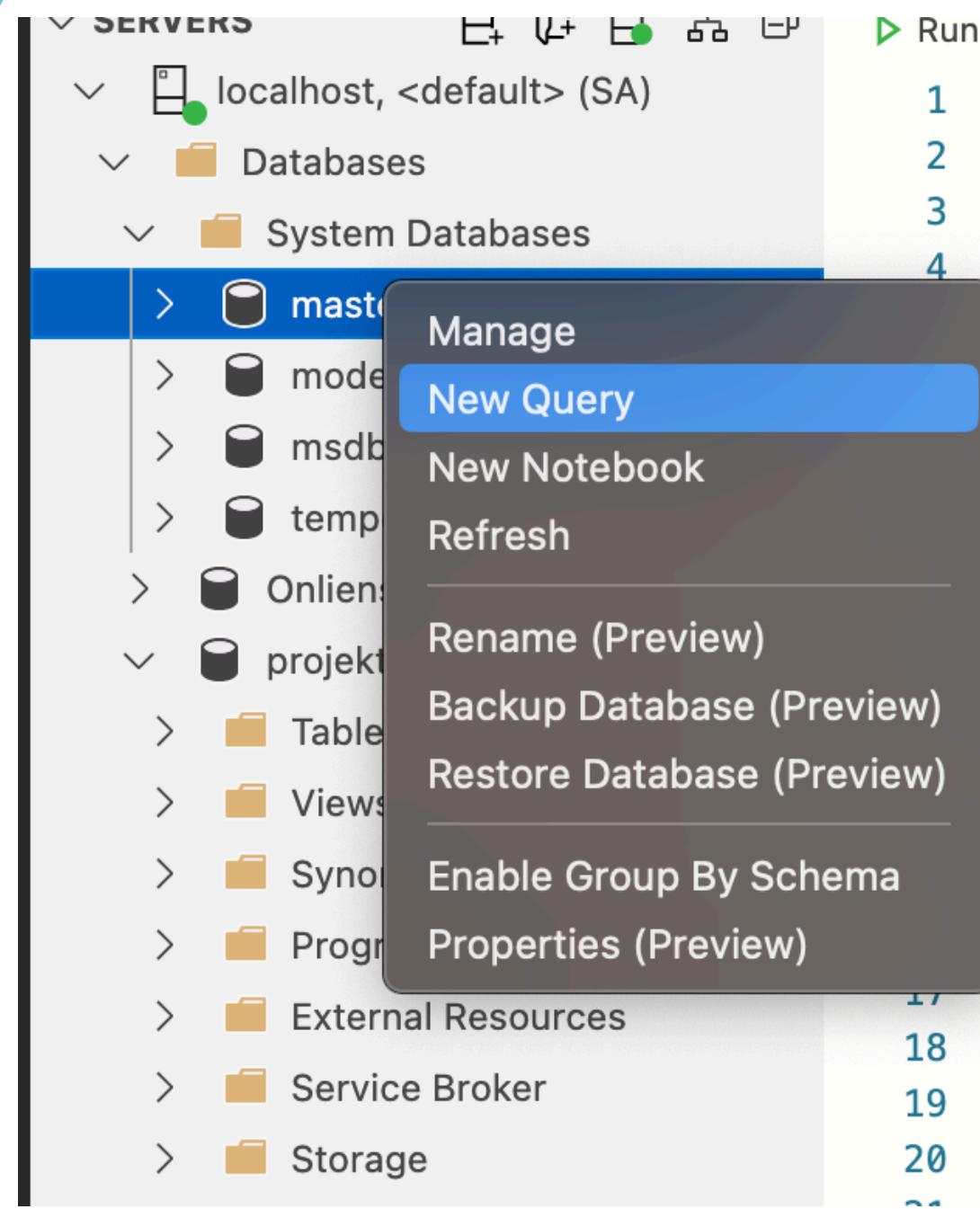
Shpjegim i skemës:
Skema është e përbërë nga 6 tabula dhe 2 tabula të krijuara si rezultat i lidhjeve N:N ndërmjet tabelave.

RELATIONAL SCHEMA



• KOMANDAT BAZË NË SQL

1. Klikojmë me të djathtën tek një bazë të dhënash në sistem dhe klikojmë tek opzioni "New Query".



2- Më pas, në fushën e hapur, ekzekuto komandën: 'create database projekt1' dhe më pas shtyp komandën 'run'.

The screenshot shows the 'Messages' pane from the SSMS interface. It displays the following log entries:

- 06:51:01 Started executing query at Line 1
- Commands completed successfully.
- Total execution time: 00:00:00.366

• KOMANDAT BAZË NË SQL

3- Bëj refresh të databazës dhe shohim që projekti1 është shfaqur në databazat e sistemit tonë.



1

4-Duke përdorur komandën Create Table, ne krijojmë një tabelë e cila në rastin tonë quhet "Faculteti" dhe duke hapur kllapa rrëthore brenda saj vendosim atributet që kjo bazë të dhënash do të ketë. Në fund, duhet të mbyllët me pikëpresje.

The screenshot shows the SSMS interface with the 'Query Editor' window open. The code for creating the 'Faculty' table is displayed:

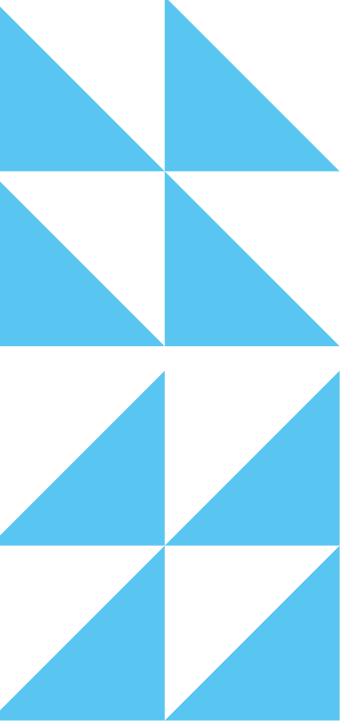
```
1 CREATE TABLE Faculty (
2     id INT PRIMARY KEY,
3     code VARCHAR(45),
4     name VARCHAR(45),
5     description VARCHAR(45),
6     address VARCHAR(45)
7 );
8
```

The code is highlighted in blue, and the 'Run' button is visible at the top of the editor.

INSERTIMI I TE DHENAVE

```
Run Cancel Disconnect Change Database: projekt1 Estimated Plan Enable Actual Plan Parse
9 --shtimi i vlerave
10
11 INSERT INTO Faculty (id, code, name, description, address) VALUES
12 (1, 'FAC01', 'Faculty of Science', 'Department of Physics', '123 Science St.'),
13 (2, 'FAC02', 'Faculty of Arts', 'Department of Humanities', '456 Arts Ave.'),
14 (3, 'FAC03', 'Faculty of Engineering', 'Department of Civil Engineering', '789 Engineering Rd.'),
15 (4, 'FAC04', 'Faculty of Business', 'Department of Management', '101 Business Blvd.'),
16 (5, 'FAC05', 'Faculty of Law', 'Department of Legal Studies', '202 Law Ln.'),
17 (6, 'FAC06', 'Faculty of Medicine', 'Department of Medical Sciences', '303 Health Dr.'),
18 (7, 'FAC07', 'Faculty of Education', 'Department of Teaching', '404 Education Pkwy.'),
19 (8, 'FAC08', 'Faculty of IT', 'Department of Computer Science', '505 IT St.'),
20 (9, 'FAC09', 'Faculty of Social Sciences', 'Department of Psychology', '606 Society Blvd.'),
21 (10, 'FAC10', 'Faculty of Environmental Studies', 'Department of Environmental Science', '707 Green'),
22 (11, 'FAC11', 'Faculty of Mathematics', 'Department of Applied Mathematics', '808 Math Ave.'),
23 (12, 'FAC12', 'Faculty of Chemistry', 'Department of Organic Chemistry', '909 Chem St.'),
24 (13, 'FAC13', 'Faculty of Biology', 'Department of Genetics', '1010 Bio Rd.'),
25 (14, 'FAC14', 'Faculty of Architecture', 'Department of Urban Planning', '1111 Arch Blvd.'),
26 (15, 'FAC15', 'Faculty of Agriculture', 'Department of Agronomy', '1212 Greenfield Ln.'),
27 (16, 'FAC16', 'Faculty of Economics', 'Department of Economics', '1313 Money St.'),
28 (17, 'FAC17', 'Faculty of Pharmacy', 'Department of Pharmacology', '1414 Health Dr.'),
29 (18, 'FAC18', 'Faculty of Dentistry', 'Department of Dental Sciences', '1515 Smile Ave.'),
30 (19, 'FAC19', 'Faculty of Nursing', 'Department of Nursing', '1616 Care Blvd.'),
31 (20, 'FAC20', 'Faculty of Veterinary', 'Department of Animal Health', '1717 Pet Rd.'),
32 (21, 'FAC21', 'Faculty of Theology', 'Department of Religious Studies', '1818 Faith Ln.'),
33 (22, 'FAC22', 'Faculty of Anthropology', 'Department of Cultural Anthropology', '1919 Culture St.'),
34 (23, 'FAC23', 'Faculty of Music', 'Department of Musicology', '2020 Harmony Ave.'),
```

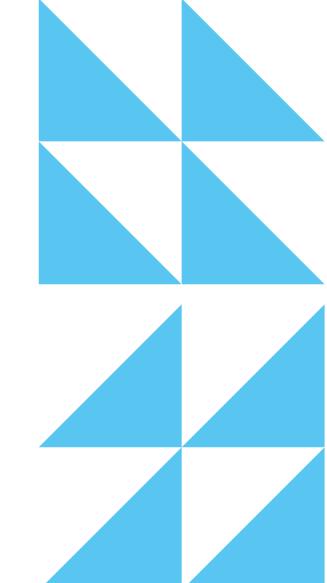
Duke perdorur komanden insert into+emri_i_tabeles(kolonat e tablees) ne vensosim te dhenat qe deshirojme ne secilen kolone te tablees sone



**FILLIMI I ANALIZËS SË TË
DHËNAVE DUKE PËRDORUR
PYETJE.**



SIMPLE SELECT



```
Run Cancel Disconnect Change Database: projekt1
Estimated Plan Enable Actual Plan Parse Enable SQLCMD [ ]  
112  
113 --shikojme te dhenat e tabelles  
114 select *  
115 from Faculty
```

Zgjidh të gjitha të dhënat nga tabela faculty.



	id	code	name	description	address
1	1	FAC01	Faculty of Science	Department of Physics	123 Science St.
2	2	FAC02	Faculty of Arts	Department of Humanities	456 Arts Ave.
3	3	FAC03	Faculty of Engineering	Department of Civil Engineering	789 Engineering Rd.
4	4	FAC04	Faculty of Business	Department of Management	101 Business Blvd.
5	5	FAC05	Faculty of Law	Department of Legal Studies	202 Law Ln.
6	6	FAC06	Faculty of Medicine	Department of Medical Sciences	303 Health Dr.
7	7	FAC07	Faculty of Education	Department of Teaching	404 Education Pkwy.
8	8	FAC08	Faculty of IT	Department of Computer Science	505 IT St.
9	9	FAC09	Faculty of Social Sciences	Department of Psychology	606 Society Blvd.
10	10	FAC10	Faculty of Environmental Studies	Department of Environmental Science	707 Green Way
11	11	FAC11	Faculty of Mathematics	Department of Applied Mathematics	808 Math Ave.
12	12	FAC12	Faculty of Chemistry	Department of Organic Chemistry	909 Chem St.
13	13	FAC13	Faculty of Biology	Department of Genetics	1010 Bio Rd.

PËRZGJIDH DEPARTAMENTIN DHE EMRIN E FAKULTETIT PËRKATËS.

```
-- Përzgjidh departamentin dhe emrin e fakultetit përkatës.  
23 SELECT Department.*, Faculty.name  
24 FROM Department JOIN Faculty ON Department.faculty_id=Faculty.id  
25
```

Results Messages

	id	code	name	year	faculty_id	name
	1	CS101	Computer Science	2021	1	Faculty of Science
	2	ENG102	English Literature	2022	2	Faculty of Arts
	3	MATH103	Mathematics	2020	3	Faculty of Engineering
	4	BI0104	Biology	2021	4	Faculty of Business
	5	PHY105	Physics	2022	5	Faculty of Law
	6	CHE106	Chemistry	2021	1	Faculty of Science
	7	HIS107	History	2022	2	Faculty of Arts
	8	PSY108	Psychology	2020	3	Faculty of Engineering
	9	SOC109	Sociology	2021	4	Faculty of Business
0	10	EC0110	Economics	2022	5	Faculty of Law
1	11	CS111	Computer Science Advanced	2021	1	Faculty of Science
2	12	ENG112	English Literature II	2022	2	Faculty of Arts
3	13	MATH113	Mathematics II	2020	3	Faculty of Engineering
4	14	BI0114	Biology II	2021	4	Faculty of Business
5	15	PHY115	Physics II	2022	5	Faculty of Law
6	16	CHE116	Advanced Chemistry	2021	1	Faculty of Science
7	17	HIS117	Modern History	2022	2	Faculty of Arts

Normal Mode | ⌂ 4 ⌃ 0 | In 23 Col 1 (98 selected) | Spaces: 4 | UTE-8 | LF | SQL | 100 rows | MSSQL | 00:00:00

PËRZGJIDH PROGRAMET E OFRUARA NGA FAKULTETI I INXHINIERISË (ME KOD FAKULTETI FAC01).

```
25
26 -- Përzgjidh programet e ofruara nga fakulteti i inxhinierisë (me kod fakultet fac01) .
27
28 SELECT *
29 FROM Department
30 WHERE Department.faculty_id =
31   (SELECT id
32   FROM Faculty
33   WHERE code = 'fac01'
34 );
```

Results Messages

	id	code	name	year	faculty_id
1	1	CS101	Computer Science	2021	1
2	6	CHE106	Chemistry	2021	1
3	11	CS111	Computer Science Advanced	2021	1
4	16	CHE116	Advanced Chemistry	2021	1
5	21	CS121	Data Structures	2021	1
6	26	CHE126	Organic Chemistry	2021	1
7	31	CS131	Algorithms	2021	1
8	36	CHE136	Inorganic Chemistry	2021	1
9	41	CS141	Software Engineering	2021	1
10	46	CHE146	Analytical Chemistry	2021	1
11	51	CS151	Artificial Intelligence	2021	1
12	56	CHE156	Biochemistry	2021	1

Përzgjidh studentët që kanë lindur midis viteve 1997 dhe 2000

```
9  -- Përzgjidh studentët që kanë lindur midis viteve 1997 dhe 2000.  
10  
11  SELECT *  
12  FROM Student  
13  WHERE birthdate BETWEEN '1997-01-01' AND '2000-12-31'  
14
```

Results Messages

	id	name	surname	birthdate
1	1	John	Doe	2000-01-15
2	2	Jane	Smith	1999-02-20
3	4	Bob	Brown	2000-04-10
4	5	Charlie	Davis	1998-05-25
5	6	Daisy	Garcia	1997-06-30
6	8	Fiona	Hernandez	1999-08-01
7	9	George	Lopez	2000-09-18
8	10	Hannah	Wilson	1998-10-30
9	12	Julia	Thomas	1999-12-15
10	14	Laura	Moore	1997-02-17
11	15	Michael	Jackson	2000-03-03
12	16	Nina	Lee	1998-04-26
13	18	Pamela	Thompson	1999-06-29
14	19	Quinn	White	2000-07-11
15	20	Rita	Harris	1998-08-19

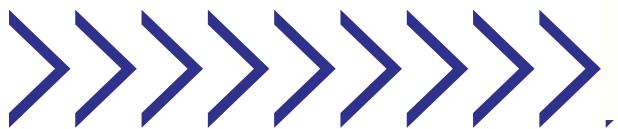


PËRZGJIDH TË GJITHA LËNDËT E AKTIVIZUARA PËR PROGRAMIN “BACHELOR OF SCIENCE IN COMPUTER SCIENCE” GJATË VITIT AKADEMIK 2023.

```
38
39  SELECT Course.*
40  FROM Course
41  JOIN Opens ON Course.id = Opens.course_id
42  JOIN Program ON Program.id = Opens.program_id
43  WHERE Program.name = 'Bachelor of Science in Computer Science'
44  AND Opens.academic_year = 2023
45
```

Results Messages

	id	code	name	ects
1	1	CS101	Introduction to Computer Science	6
2	2	CS102	Data Structures	6
3	3	CS201	Algorithms	6



PËRZGJIDH LËNDËT QË NUK JANË HAPUR PËR PROGRAMIN “MASTER OF ARTS IN ENGLISH LITERATURE” GJATË VITIT AKADEMIK 2023.

```
49  SELECT Course.*  
50  FROM Course  
51  WHERE id NOT IN (  
52      SELECT Opens.course_id  
53      FROM Opens  
54      JOIN Program ON Opens.program_id = Program.id  
55      WHERE Program.name = 'Master of Arts in english literature'  
56      AND Opens.academic_year = 2023  
57  );  
58
```

Results Messages

	id	code	name	ects
1	4	CS202	Operating Systems	6
2	5	CS301	Database Systems	6
3	6	CS302	Software Engineering	6
4	7	CS401	Web Development	6
5	8	CS402	Mobile Application Development	6
6	9	CS403	Machine Learning	6
7	10	CS404	Artificial Intelligence	6
8	11	CS405	Computer Networks	6
9	12	CS406	Cybersecurity	6
10	13	CS407	Cloud Computing	6
11	14	CS408	Human-Computer Interaction	6
12	15	CS409	Data Mining	6
13	16	CS410	Big Data Analytics	6
14	17	CS411	Information Retrieval	6
15	18	CS412	Natural Language Processing	6

PERZGJIDH STUDENTËT QË JANË REGJISTRUAR NË DISA LËNDË TË CAKTUARA (IN)? (PERDORIMI I IN DHE DISTINCT)

```
--  
93  SELECT DISTINCT Student.*  
94  FROM Student  
95  JOIN taken ON Student.id = taken.student_id  
96  WHERE Taken.course_id IN (1, 2);  
97
```

Results Messages

	id	name	surname	birthdate
1	1	John	Doe	2000-01-15
2	2	Jane	Smith	1999-02-20
3	3	Alice	Johnson	2001-03-05
4	4	Bob	Brown	2000-04-10
5	5	Charlie	Davis	1998-05-25
6	6	Daisy	Garcia	1997-06-30
7	7	Ethan	Martinez	2002-07-12
8	8	Fiona	Hernandez	1999-08-01
9	13	Kevin	Taylor	2002-01-28
10	14	Laura	Moore	1997-02-17
11	15	Michael	Jackson	2000-03-03
12	16	Nina	Lee	1998-04-26
13	17	Oscar	Martin	2001-05-20
14	18	Pamela	Thompson	1999-06-29
15	19	Quinn	White	2000-07-11

NË BAZË TË BINJAKEZIMIT ME UNIVERSITETET AMERIKANE, NE DUHET TË SHPREHIM NOTAT E STUDENTËVE ME VLERËSIM AMERIKAN DUKE PËRDORUR NOTAT: A, B, C, D, E, F.

```
101  
102 SELECT  
103   Student.id,  
104   Student.name,  
105   Student.surname,  
106   taken.grade,  
107   CASE  
108     WHEN taken.grade >= 90 THEN 'A'  
109     WHEN taken.grade >= 80 THEN 'B'  
110     WHEN taken.grade >= 70 THEN 'C'  
111     WHEN taken.grade >= 60 THEN 'D'  
112     WHEN taken.grade < 60 THEN 'F'  
113     ELSE 'N/A'  
114   END AS grade_category  
115 FROM  
116   Student  
117 JOIN  
118   taken ON Student.id = Taken.student_id;  
119
```

Results Messages

	id	name	surname	grade	grade_category
1	1	John	Doe	85	B
2	2	Jane	Smith	90	A
3	13	Kevin	Taylor	95	A
4	14	Laura	Moore	40	F
5	25	Wendy	Hall	90	A
6	26	Xander	Allen	44	F
7	37	Isla	Perez	92	A
8	38	Jack	Roberts	79	C

MË KRIJO NJË TABELË TË RE E CILA TË PËRMBAJË LEKTORËT BASHKË ME LËNDËT QË ATA JAPIN NË UNIVERSITET.

```
---  
121  
122 CREATE VIEW LECTORS AS  
123 <-- SELECT  
124 | Staff1.staff_id AS teacher_id, Staff1.name AS teacher_name, Staff1.surname AS teacher_surname, Course.id AS course_id,  
125 | Course.name AS course_name  
126 FROM Staff1  
127 JOIN Opens ON Staff1.staff_id = Opens.staff_id  
128 JOIN Course ON Opens.course_id = Course.id;  
129  
130 select *  
131 from LECTORS
```

Results Messages

	teacher_id	teacher_name	teacher_surname	course_id	course_name
1	1	John	Doe	1	Introduction to Computer Science
2	31	Elijah	Allen	1	Introduction to Computer Science
3	61	Levi	Rivera	1	Introduction to Computer Science
4	91	Asher	Butler	1	Introduction to Computer Science
5	2	Jane	Smith	2	Data Structures
6	32	Amelia	Sanchez	2	Data Structures
7	62	Nora	Cooper	2	Data Structures
8	92	Bella	Simmons	2	Data Structures
9	3	Michael	Johnson	3	Algorithms
10	33	Noah	Wright	3	Algorithms
11	63	Daniel	Richardson	3	Algorithms
12	93	Julian	Foster	3	Algorithms
13	4	Emily	Davis	1	Introduction to Computer Science

PAS NJE VENDIMI GJYKATE STUDENTI ME EMRIN BOB TANI QUHET ALFRED.JU LUTEM APLIKOJE KETE NDRYSHIM NE SISTEM

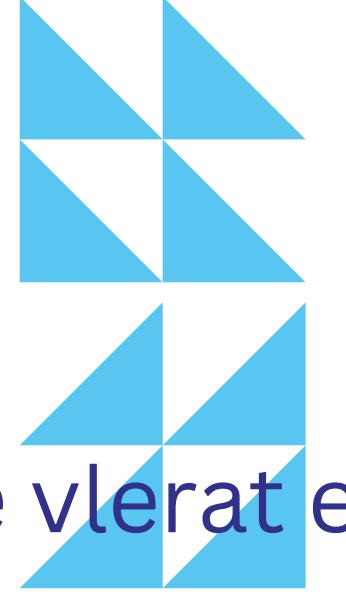
```
--  
133  --replace  
134  SELECT  
135    id,  
136    name,  
137    surname,  
138    REPLACE(name, 'BOB', 'Alfred') AS emri_i_perditesuar  
139  FROM  
140    Student;  
141
```

Results Messages

	id	name	surname	updated_name
1	1	John	Doe	John
2	2	Jane	Smith	Jane
3	3	Alice	Johnson	Alice
4	4	Bob	Brown	Alfred
5	5	Charlie	Davis	Charlie
6	6	Daisy	Garcia	Daisy
7	7	Ethan	Martinez	Ethan
8	8	Fiona	Hernandez	Fiona
9	9	George	Lopez	George
10	10	Hannah	Wilson	Hannah
11	11	Ian	Anderson	Ian
12	12	Julia	Thomas	Julia
13	13	Kevin	Taylor	Kevin
14	14	Laura	Moore	Laura



MË JEP NJË INFORMACION MË TË DETAJUAR PËRSA I PËRKET GJINISË SË LEKTORËVE NË UNIVERSITETIN TONË.

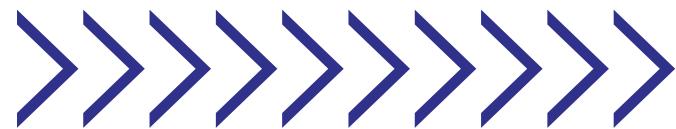


1. Shtojmë një kolonë në tabelën staff1 të quajtur gender.

**ALTER TABLE Staff1
ADD gender VARCHAR(10);**

2- Përditësojmë tabelën tonë me vlerat e reja për çdo lektor.

```
UPDATE Staff1
SET gender = CASE staff_id
    WHEN 1 THEN 'Male' WHEN 2 THEN 'Female' WHEN 3 THEN 'Male' WHEN 4 THEN 'Female' WHEN 5 THEN 'Male' WHEN 6 THEN 'Female'
    WHEN 7 THEN 'Male' WHEN 8 THEN 'Female' WHEN 9 THEN 'Male' WHEN 10 THEN 'Female' WHEN 11 THEN 'Male' WHEN 12 THEN 'Female'
    WHEN 13 THEN 'Male' WHEN 14 THEN 'Female' WHEN 15 THEN 'Male' WHEN 16 THEN 'Female' WHEN 17 THEN 'Male' WHEN 18 THEN 'Female'
    WHEN 19 THEN 'Male' WHEN 20 THEN 'Female' WHEN 21 THEN 'Male' WHEN 22 THEN 'Female' WHEN 23 THEN 'Male' WHEN 24 THEN 'Female'
    WHEN 25 THEN 'Male' WHEN 26 THEN 'Female' WHEN 27 THEN 'Male' WHEN 28 THEN 'Female' WHEN 29 THEN 'Male' WHEN 30 THEN 'Female'
    WHEN 31 THEN 'Male' WHEN 32 THEN 'Female' WHEN 33 THEN 'Male' WHEN 34 THEN 'Female' WHEN 35 THEN 'Male' WHEN 36 THEN 'Female'
    WHEN 37 THEN 'Male' WHEN 38 THEN 'Female' WHEN 39 THEN 'Male' WHEN 40 THEN 'Female' WHEN 41 THEN 'Male' WHEN 42 THEN 'Female'
    WHEN 43 THEN 'Male' WHEN 44 THEN 'Female' WHEN 45 THEN 'Male' WHEN 46 THEN 'Female' WHEN 47 THEN 'Male' WHEN 48 THEN 'Female'
    WHEN 49 THEN 'Male' WHEN 50 THEN 'Female' WHEN 51 THEN 'Male' WHEN 52 THEN 'Female' WHEN 53 THEN 'Male' WHEN 54 THEN 'Female'
    WHEN 55 THEN 'Male' WHEN 56 THEN 'Female' WHEN 57 THEN 'Male' WHEN 58 THEN 'Female' WHEN 59 THEN 'Male' WHEN 60 THEN 'Female'
    WHEN 61 THEN 'Male' WHEN 62 THEN 'Female' WHEN 63 THEN 'Male' WHEN 64 THEN 'Female' WHEN 65 THEN 'Male' WHEN 66 THEN 'Female'
    WHEN 67 THEN 'Male' WHEN 68 THEN 'Female' WHEN 69 THEN 'Male' WHEN 70 THEN 'Female' WHEN 71 THEN 'Male' WHEN 72 THEN 'Female'
    WHEN 73 THEN 'Male' WHEN 74 THEN 'Female' WHEN 75 THEN 'Male' WHEN 76 THEN 'Female' WHEN 77 THEN 'Male' WHEN 78 THEN 'Female'
    WHEN 79 THEN 'Male' WHEN 80 THEN 'Female' WHEN 81 THEN 'Male' WHEN 82 THEN 'Female' WHEN 83 THEN 'Male' WHEN 84 THEN 'Female'
    WHEN 85 THEN 'Male' WHEN 86 THEN 'Female' WHEN 87 THEN 'Male' WHEN 88 THEN 'Female' WHEN 89 THEN 'Male' WHEN 90 THEN 'Female'
    WHEN 91 THEN 'Male' WHEN 92 THEN 'Female' WHEN 93 THEN 'Male' WHEN 94 THEN 'Female' WHEN 95 THEN 'Male' WHEN 96 THEN 'Female'
    WHEN 97 THEN 'Male' WHEN 98 THEN 'Female' WHEN 99 THEN 'Male' WHEN 100 THEN 'Female'
END;
```



3. **

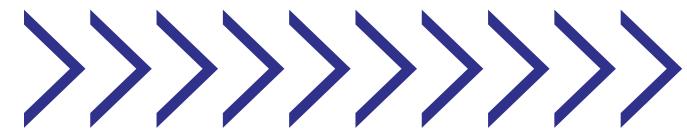
Pritmojmë të dhënat e tabelës pas shtimit të kolonës së re.

```
176 select *  
177 from Staff1  
178
```

Results Messages

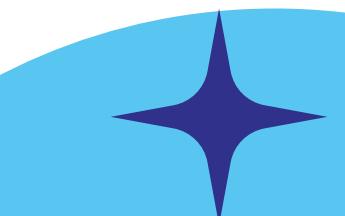
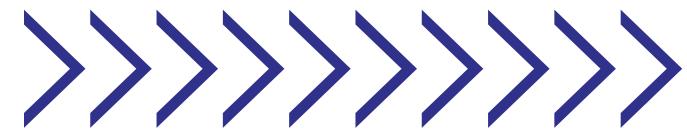
	staff_id	name	surname	birthdate	gender
1	1	John	Doe	1985-02-15	Male
2	2	Jane	Smith	1990-05-25	Female
3	3	Michael	Johnson	1982-08-30	Male
4	4	Emily	Davis	1978-01-10	Female
5	5	Chris	Garcia	1995-12-05	Male
6	6	Jessica	Martinez	1993-11-21	Female
7	7	David	Rodriguez	1987-03-17	Male
8	8	Sarah	Lee	1989-07-04	Female
9	9	Daniel	Hernandez	1981-10-22	Male
10	10	Laura	Lopez	1983-09-14	Female
11	11	James	Gonzalez	1992-04-19	Male
12	12	Amanda	Wilson	1986-06-23	Female
13	13	Matthew	Anderson	1980-02-28	Male
14	14	Sophia	Thomas	1984-03-12	Female
15	15	Joshua	Taylor	1991-05-15	Male
16	16	Ava	Moore	1988-08-18	Female
17	17	Benjam...	Jackson	1980-11-11	Male
18	18	Mia	White	1985-01-01	Female
19	19	Ethan	Harris	1994-10-10	Male

AGGREGATE FUNCTION DHE VIZUALIZIM





STRUKTURA E LËNDËVE DHE NGARKESA AKADEMIKE

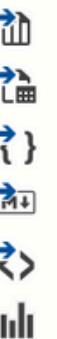


PËR ÇDO VIT AKADEMIK PËRZGJIDH NUMRIN E LËNDËVE TË AKTIVIZUARA.

```
191
192
193 --21 Për çdo vit akademik përzgjidh numrin e lëndëve të aktivizuara.
194 SELECT academic_year, COUNT(*)
195 FROM Opens
196 GROUP BY academic_year
197
```

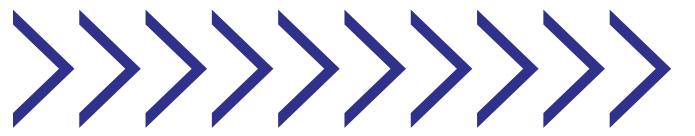
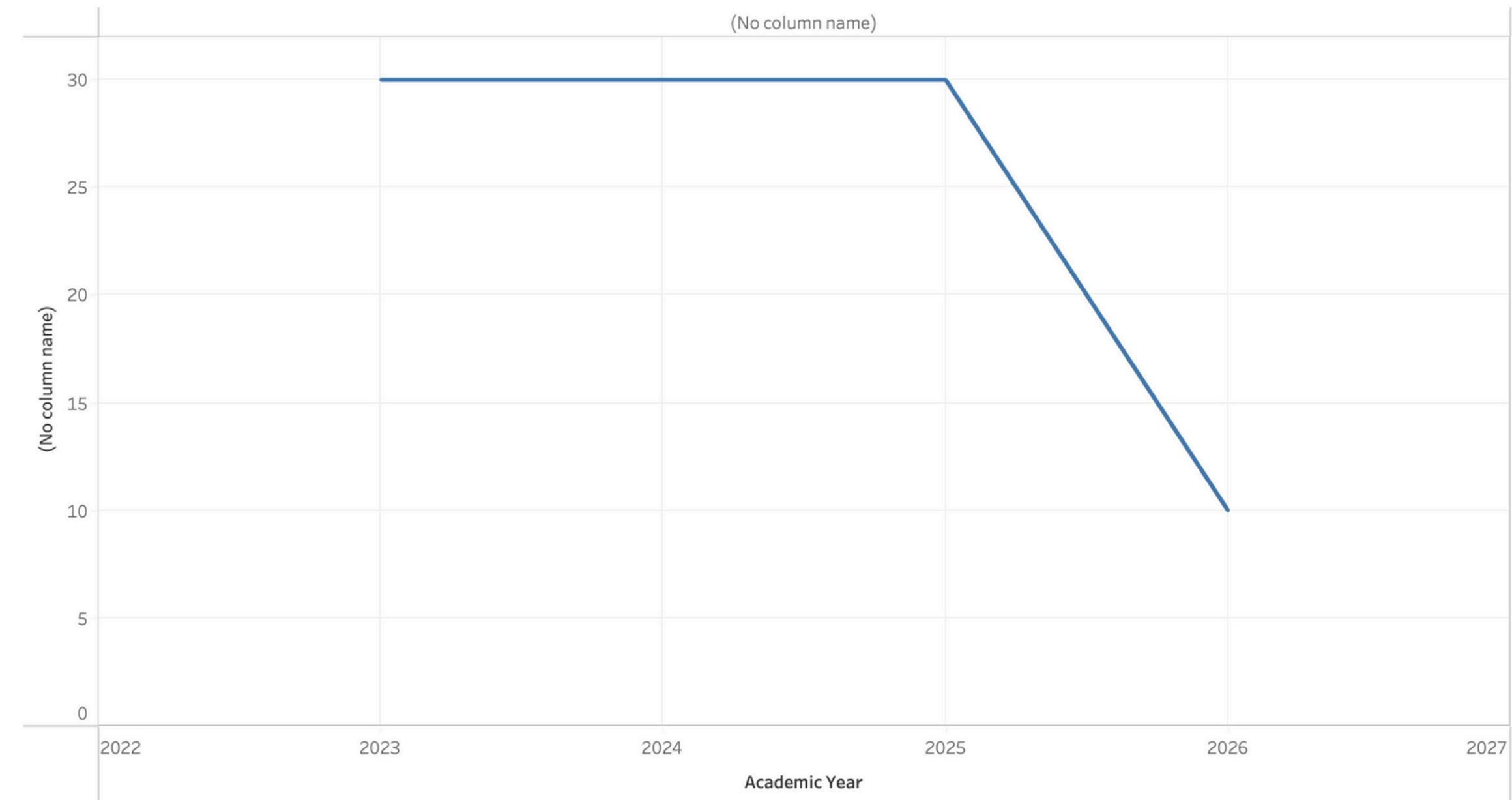
Results Messages

	academic_year ▾	(No column name) ▾
1	2023	30
2	2024	30
3	2025	30
4	2026	10



iii Columns	Measure Names	Academic Year
Rows	SUM((No column na..	

numri i lendeve te aktivizuar

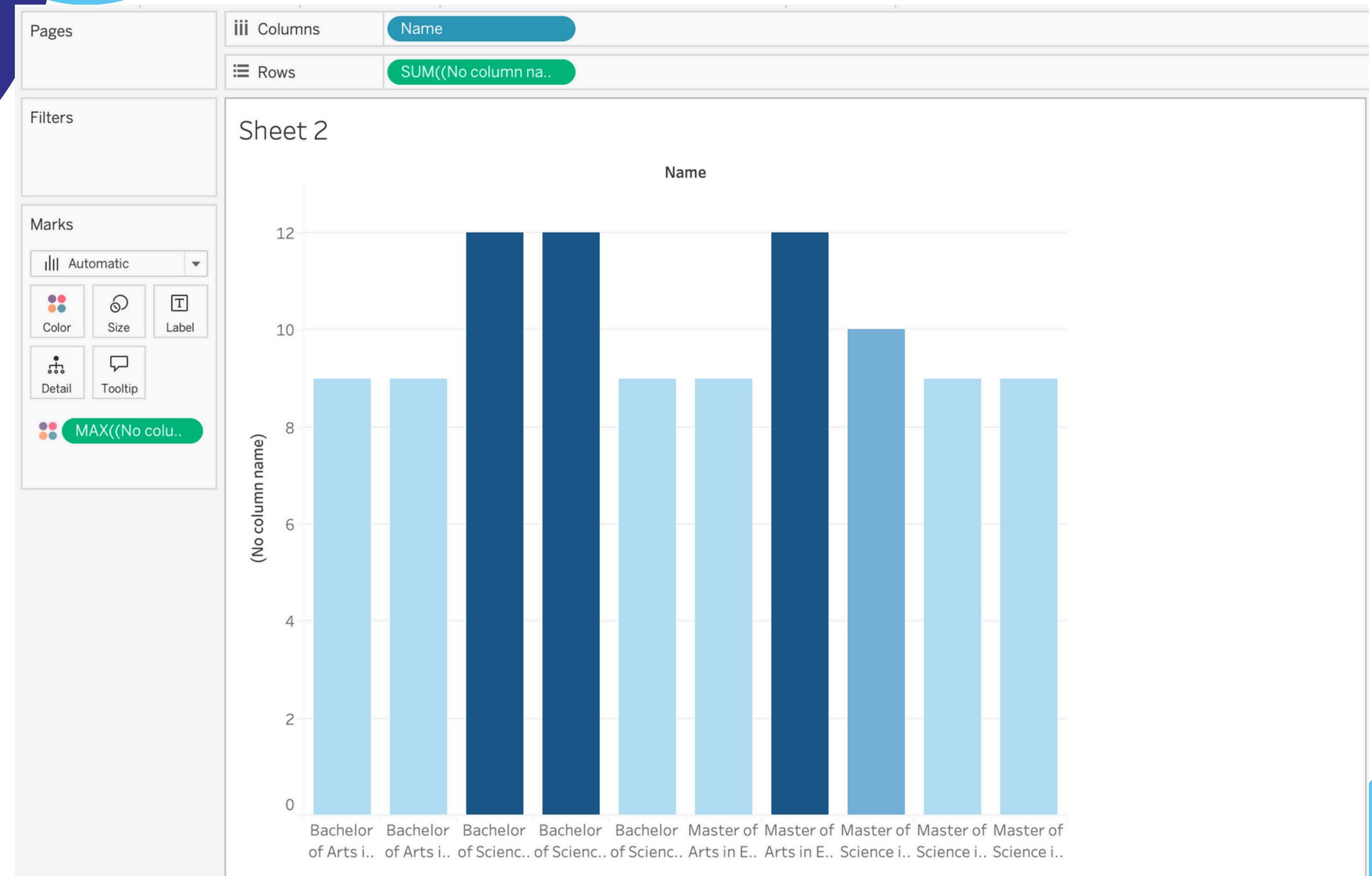


PËR ÇDO PROGRAM AKADEMIK SHFAQ NUMRIN E LËNDËVE.

```
197  
198 --Për çdo program akademik shfaq numrin e lëndëve.  
199  
200 SELECT Program.name, COUNT(*)  
201 FROM Program  
202 JOIN Opens ON Opens.program_id = Program.id  
203 GROUP BY Program.name;  
204
```

Results Messages

	name	(No column name)
1	Bachelor of Arts in History	9
2	Bachelor of Arts in Sociology	9
3	Bachelor of Science in Computer Science	12
4	Bachelor of Science in Mathematics	12
5	Bachelor of Science in Physics	9
6	Master of Arts in Economics	9
7	Master of Arts in English Literature	12
8	Master of Science in Biology	10
9	Master of Science in Chemistry	9
10	Master of Science in Psychology	9



PËR ÇDO PROGRAM DHE VIT AKADEMIK, SHFAQ SHUMËN E ECTS-VE.

```
205 --Q24 Për çdo program dhe vit akademik, shfaq shumën e ECTS-ve.  
206 SELECT Program.id, Opens.academic_year, SUM(Course.ects) as 'shuma e ects'  
207 FROM Program  
208 JOIN Opens ON Opens.program_id = Program.id  
209 JOIN Course ON Opens.course_id = Course.id  
210 GROUP BY Program.id, Opens.academic_year;  
211
```

Results Messages

	id	academic_year	shuma e ects
1	1	2023	18
2	2	2023	18
3	3	2023	18
4	4	2023	18
5	5	2023	18
6	6	2023	18
7	7	2023	18
8	8	2023	18
9	9	2023	18
10	10	2023	18
11	1	2024	18
12	2	2024	18
13	3	2024	18
14	4	2024	18

GJEJ NUMRIN MESATAR TË LËNDËVE PËR SECILIN PROGRAM (NDIHMON NE PERFORMANCEN E NGARKESES SE DEPARTAMENTIT)

	program_name	avg_courses_per_year
1	Bachelor of Arts in History	3
2	Bachelor of Arts in Sociology	3
3	Bachelor of Science in Computer Science	3
4	Bachelor of Science in Mathematics	3
5	Bachelor of Science in Physics	3
6	Master of Arts in Economics	3
7	Master of Arts in English Literature	3
8	Master of Science in Biology	2
9	Master of Science in Chemistry	3
10	Master of Science in Psychology	3





STUDIMI I DEMOGRAFISË SË STAFIT.

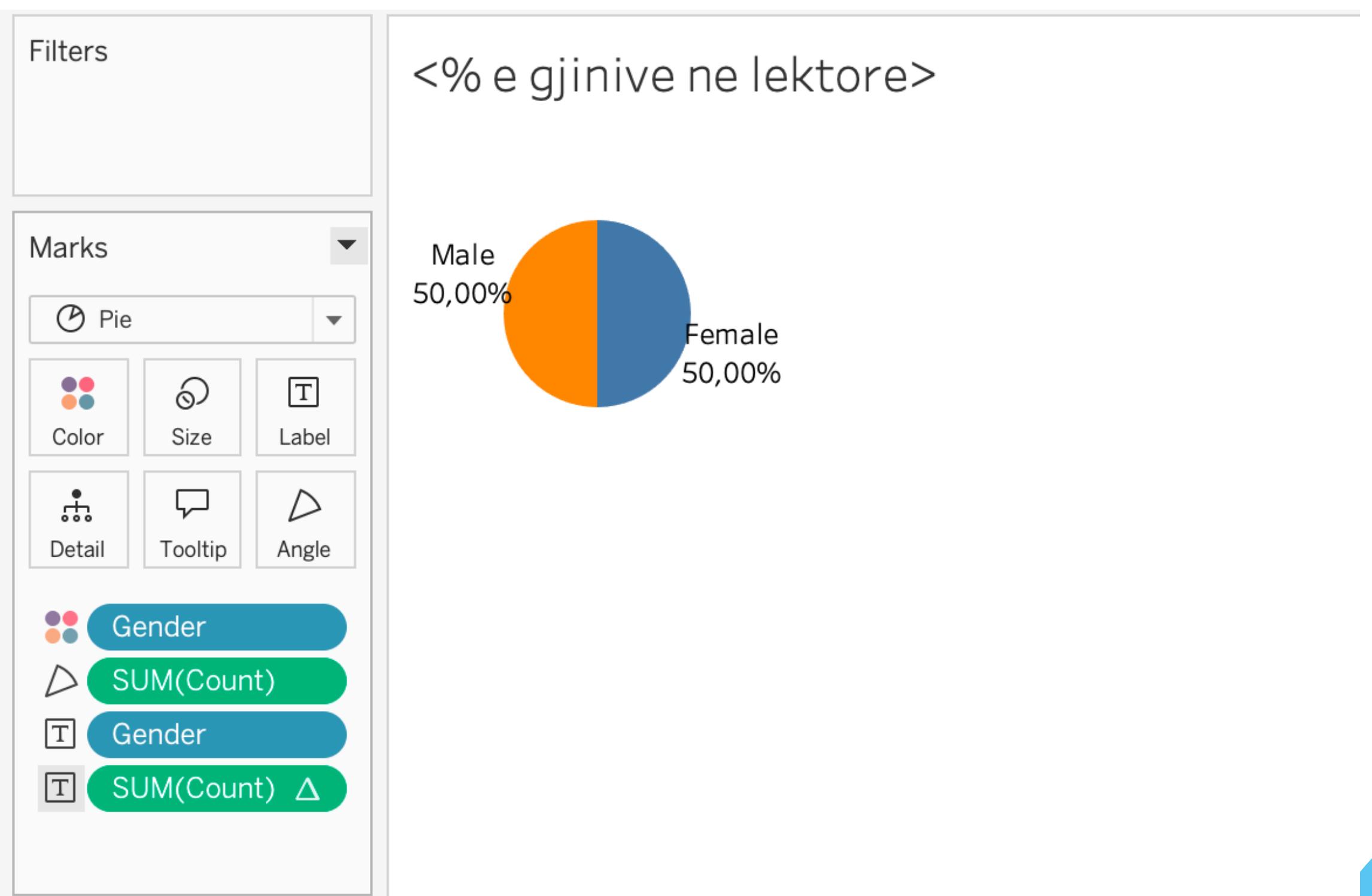
GJEJ SA JANË MESHKUJ DHE SA FEMRA.

```
215 --gjej sa jane meshkur dhe sa femra
216 SELECT COUNT(*) AS count, 'Male' AS gender
217 FROM Staff1
218 WHERE gender = 'Male'
219 GROUP BY gender
220
221 UNION ALL
222 |
223 SELECT COUNT(*) AS count, 'Female' AS gender
224 FROM Staff1
225 WHERE gender = 'Female'
226 GROUP BY gender;
227 |
```

Results Messages

	count	▼	gender	▼
1	50		Male	
2	50		Female	





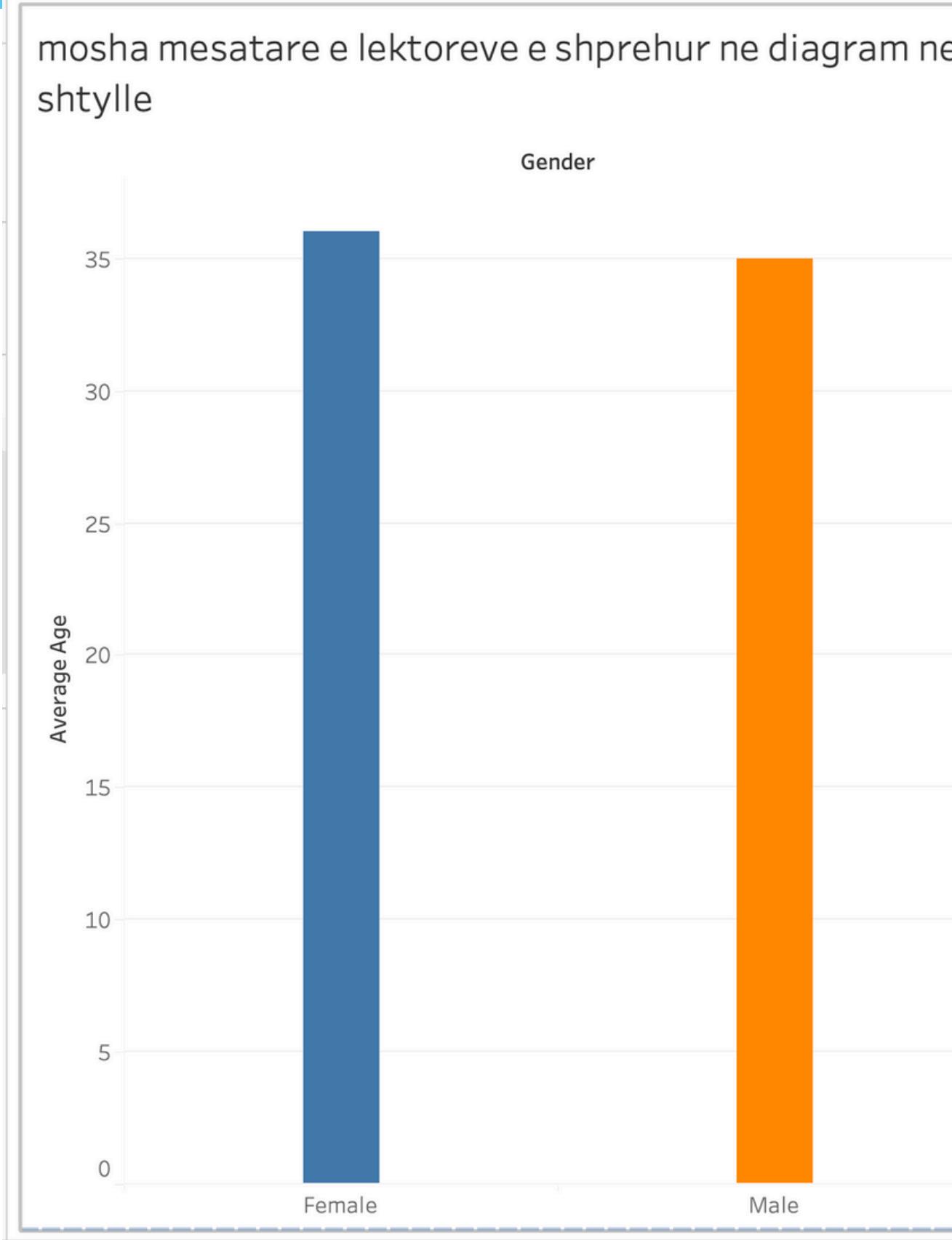
GJEJ MOSHËN MESATARE TË STAFIT, PËR SECILEN GJINI.

```
239  
240 --gjej moshen mesatare te staffit,per secilen gjini  
241  
242 SELECT  
243     gender,  
244     AVG(DATEDIFF(YEAR, birthdate, CURRENT_TIMESTAMP)) AS average_age  
245 FROM  
246     Staff1  
247 GROUP BY  
248     gender;  
249
```

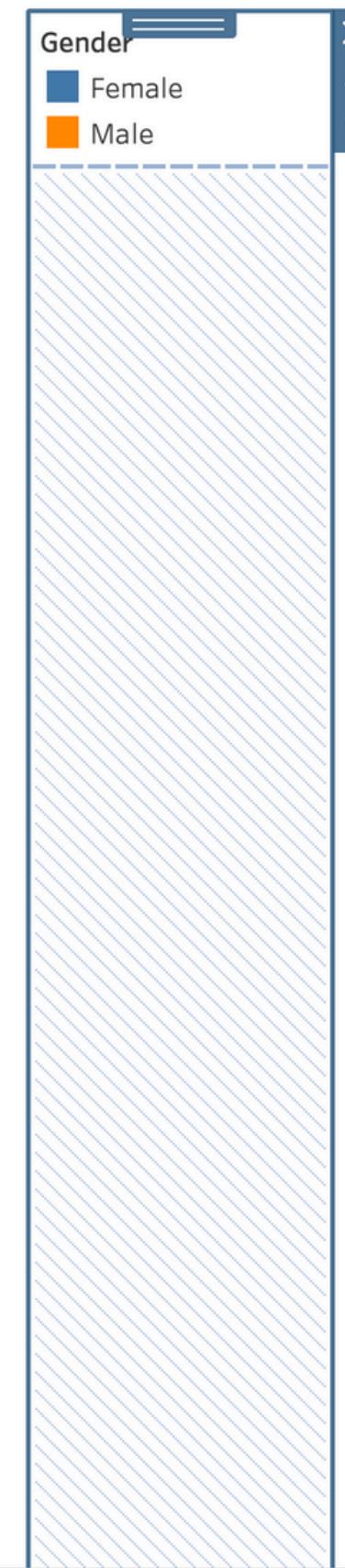
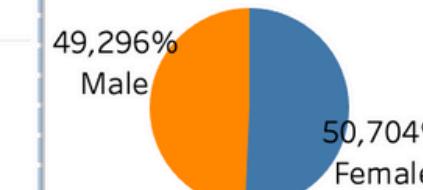
Results Messages

	gender	average_age
1	Female	36
2	Male	35





mosha
mesatare e
lektoreve e
shprehur ne
diagram rrethor



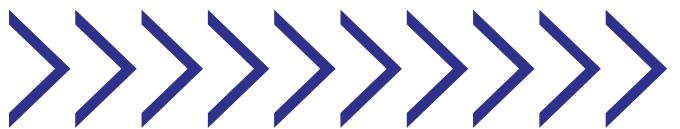
ANALIZA E PERFORMANCE'S SË STUDENTËVE

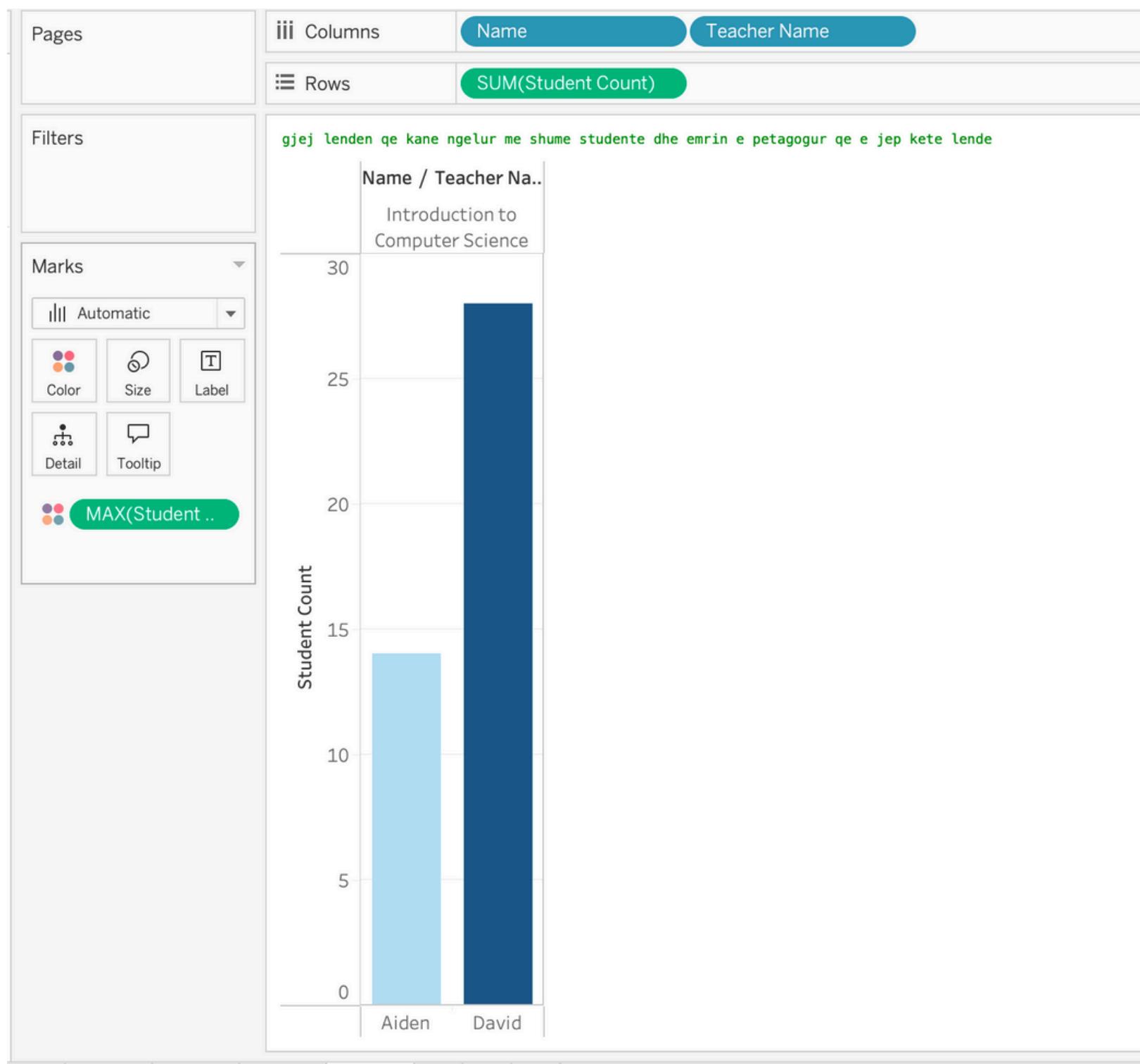
GJEJ LËNDËN QË KANË NGELUR MË SHUMË STUDENTË DHE EMRIN E PEDAGOGUT QË E JEP KËTË LËNDË.

```
229
230  SELECT top 2
231  c.name, t.name AS teacher_name, COUNT(taken.student_id) AS student_count
232  FROM Opens o
233  JOIN Taken taken ON o.course_id = taken.course_id
234  JOIN Staff1 t ON o.staff_id = t.staff_id
235  JOIN Course c ON o.course_id = c.id
236  WHERE taken.grade <= 45
237  GROUP BY c.name, t.name
238  ORDER BY student_count DESC;
239
```

Results Messages

	name	teacher_name	student_count
1	Introduction to Computer Science	David	28
2	Introduction to Computer Science	Aiden	14





NOTAT MAKSIMALE DHE MINIMALE PËR SECILIN PROGRAM(CREATE PROCEDURE)

```
386
387 CREATE PROCEDURE GetProgramGrades1 as
388 BEGIN
389     ... SELECT ...
390         p.name AS program_name,
391         MAX(t.grade) AS MaxGrade,
392         MIN(t.grade) AS MinGrade
393     FROM ...
394         Program p
395     > JOIN ...
396     > JOIN ...
397         Taken t ON o.course_id = t.course_id AND o.academic_year = t.academic_year
398     GROUP BY ...
399         p.name;
400
401 END;
```

Messages

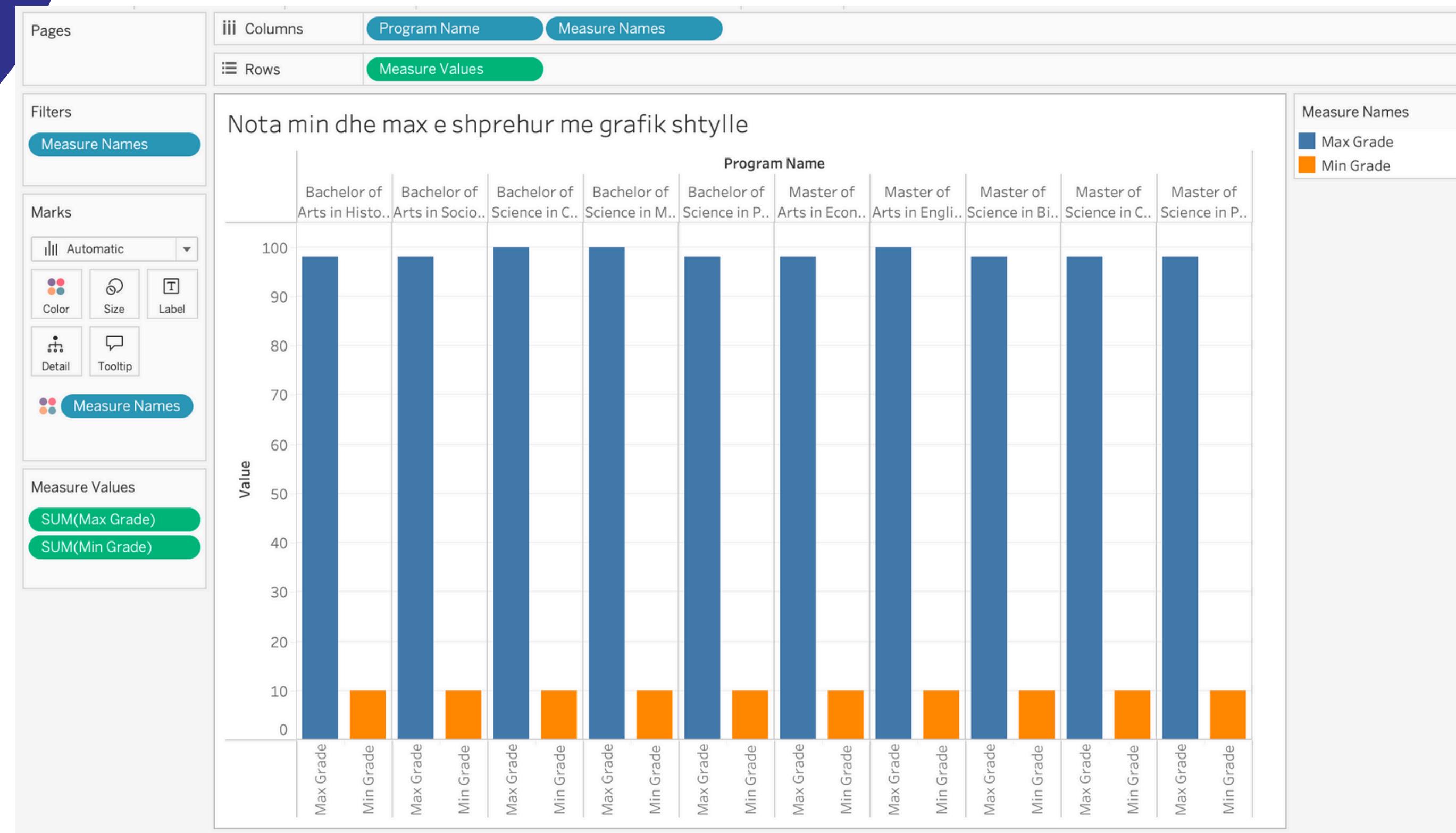
14:44:41

Started executing query at Line 386

Commands completed successfully.

Total execution time: 00:00:00.036

	program_name	MaxGrade	MinGrade
1	Bachelor of Arts in History	98	10
2	Bachelor of Arts in Sociology	98	10
3	Bachelor of Science in Computer Science	100	10
4	Bachelor of Science in Mathematics	100	10
5	Bachelor of Science in Physics	98	10
6	Master of Arts in Economics	98	10
7	Master of Arts in English Literature	100	10
8	Master of Science in Biology	98	10
9	Master of Science in Chemistry	98	10
1...	Master of Science in Psychology	98	10

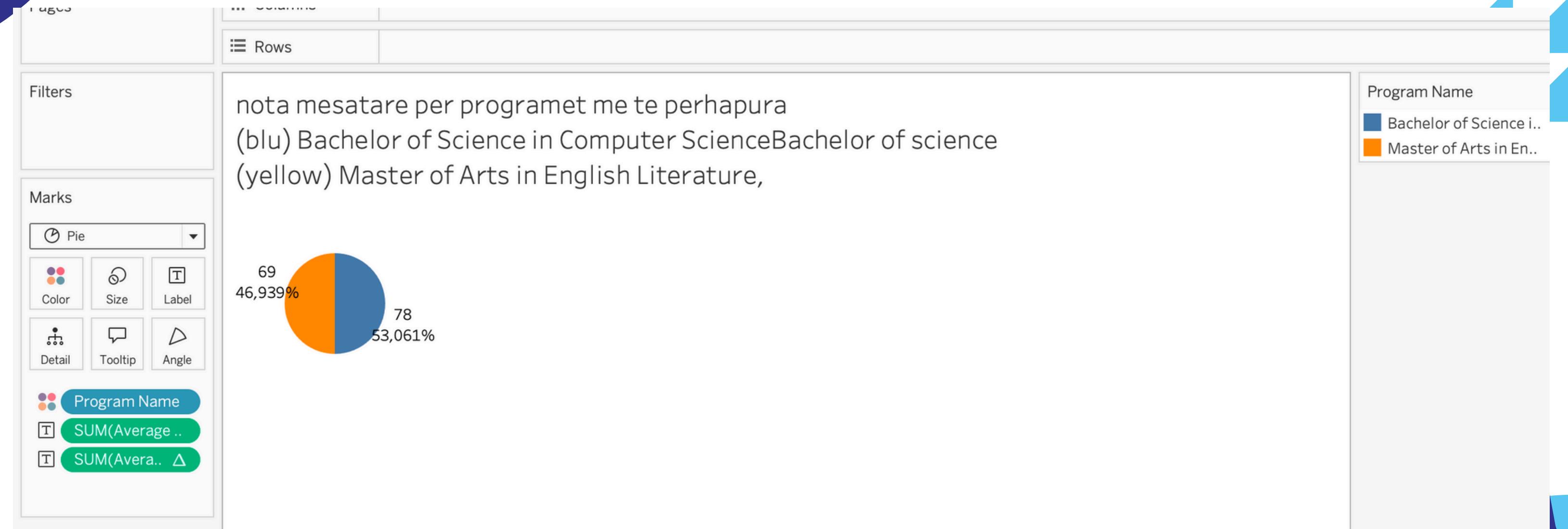


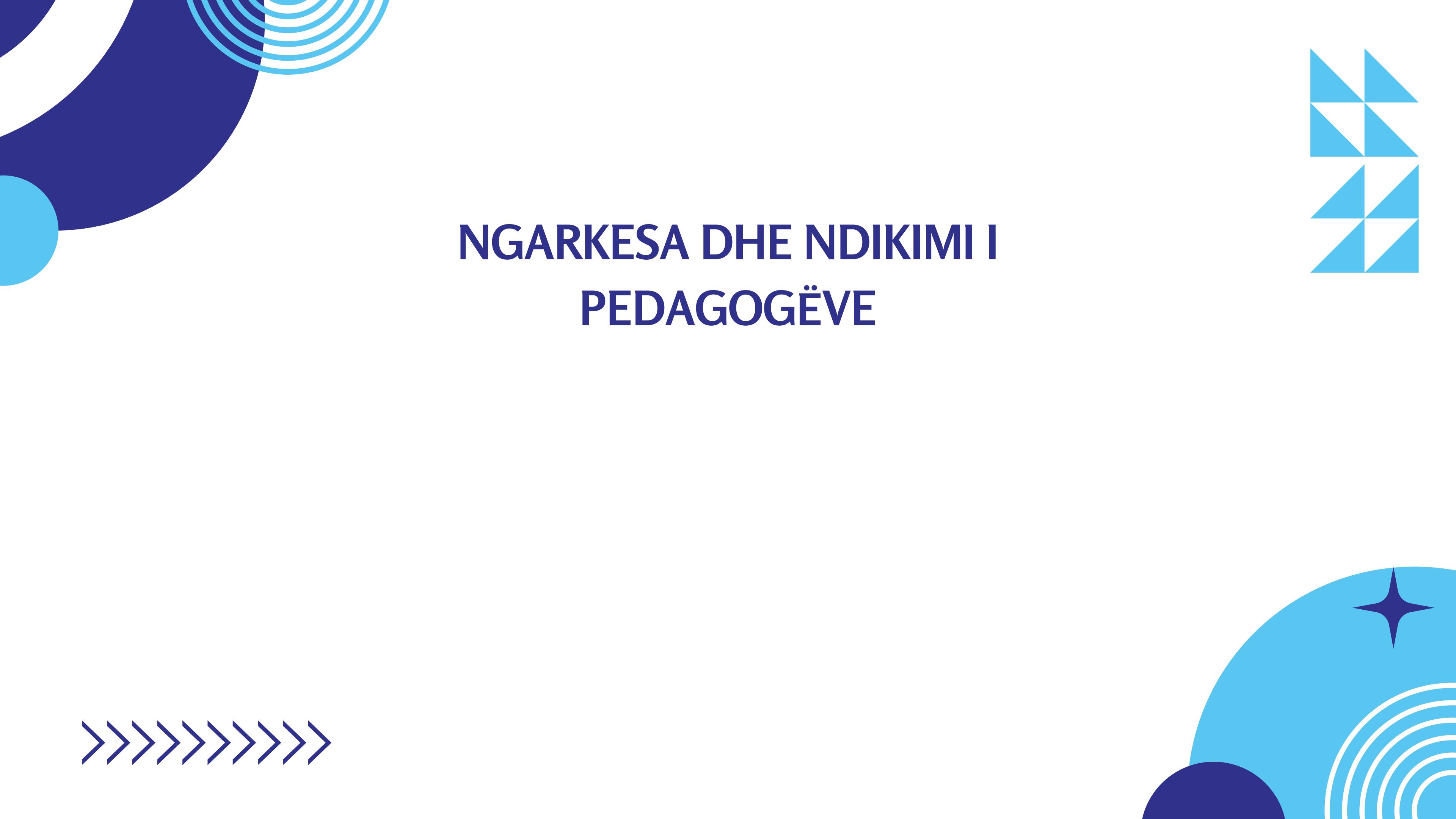
GJEJ NOTËN MESATARE TË STUDENTËVE PËR SECILIN PROGRAM AKADEMIK

```
SELECT
    P.name AS program_name,
    floor(AVG(T.grade)) AS average_grade
FROM
    Taken T
JOIN
    Program P ON T.program_id = P.id
WHERE
    T.grade IS NOT NULL
GROUP BY
    P.name
ORDER BY
    average_grade DESC;
```

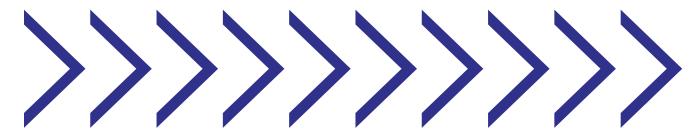
	program_name	average_grade
1	Bachelor of Science in Computer Science	78
2	Master of Arts in English Literature	69







NGARKESA DHE NDIKIMI I PEDAGOGËVE



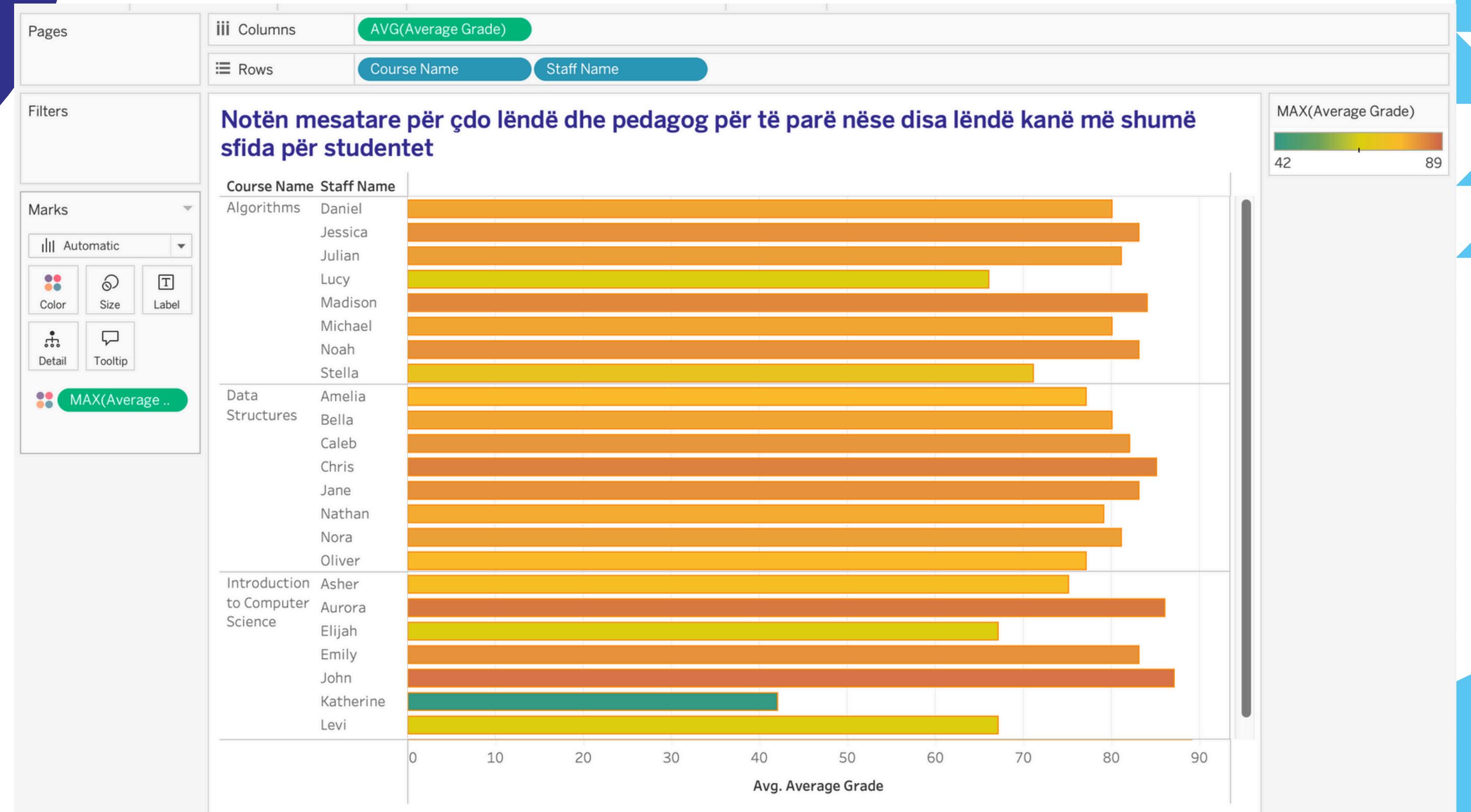
```

SELECT c.name AS course_name,s.name AS staff_name,s.surname AS staff_surname,AVG(t.grade) AS average_grade
FROM Taken t
JOIN Course c ON t.course_id = c.id
JOIN Opens o ON t.course_id = o.course_id AND t.program_id = o.program_id AND t.academic_year = o.academic_year
JOIN Staff1 s ON o.staff_id = s.staff_id
GROUP BY c.name, s.name, s.surname
ORDER BY average_grade ASC;

```

	course_name	staff_name	staff_surname	average_grade
1	Introduction to Computer Science	Katherine	Gonzales	42
2	Algorithms	Lucy	Ward	66
3	Introduction to Computer Science	Levi	Rivera	67
4	Introduction to Computer Science	Elijah	Allen	67
5	Algorithms	Stella	Alexander	71
6	Introduction to Computer Science	Asher	Butler	75
7	Data Structures	Amelia	Sanchez	77
8	Data Structures	Oliver	Scott	77
9	Data Structures	Nathan	Bryant	79
10	Algorithms	Michael	Johnson	80
11	Data Structures	Bella	Simmons	80
12	Algorithms	Daniel	Richardson	80
13	Algorithms	Julian	Foster	81
14	Data Structures	Nora	Cooper	81
15	Data Structures	Caleb	Howard	82
16	Algorithms	Jessica	Martinez	83
17	Data Structures	Jane	Smith	83
18	Algorithms	Noah	Wright	83
19	Introduction to Computer Science	Emily	Davis	83
20	Algorithms	Madison	Green	84
21	Data Structures	Chris	Garcia	85
22	Introduction to Computer Science	Aurora	Cox	86

- NOTËN MESATARE PËR ÇDO LËNDË DHE PEDAGOG PËR TË PARË NËSE DISA LËNDË KANË MË SHUMË SFIDA PËR STUDENTËT.



TRENDET DHE EVOLUIMI I PROGRAMIT AKADEMIK

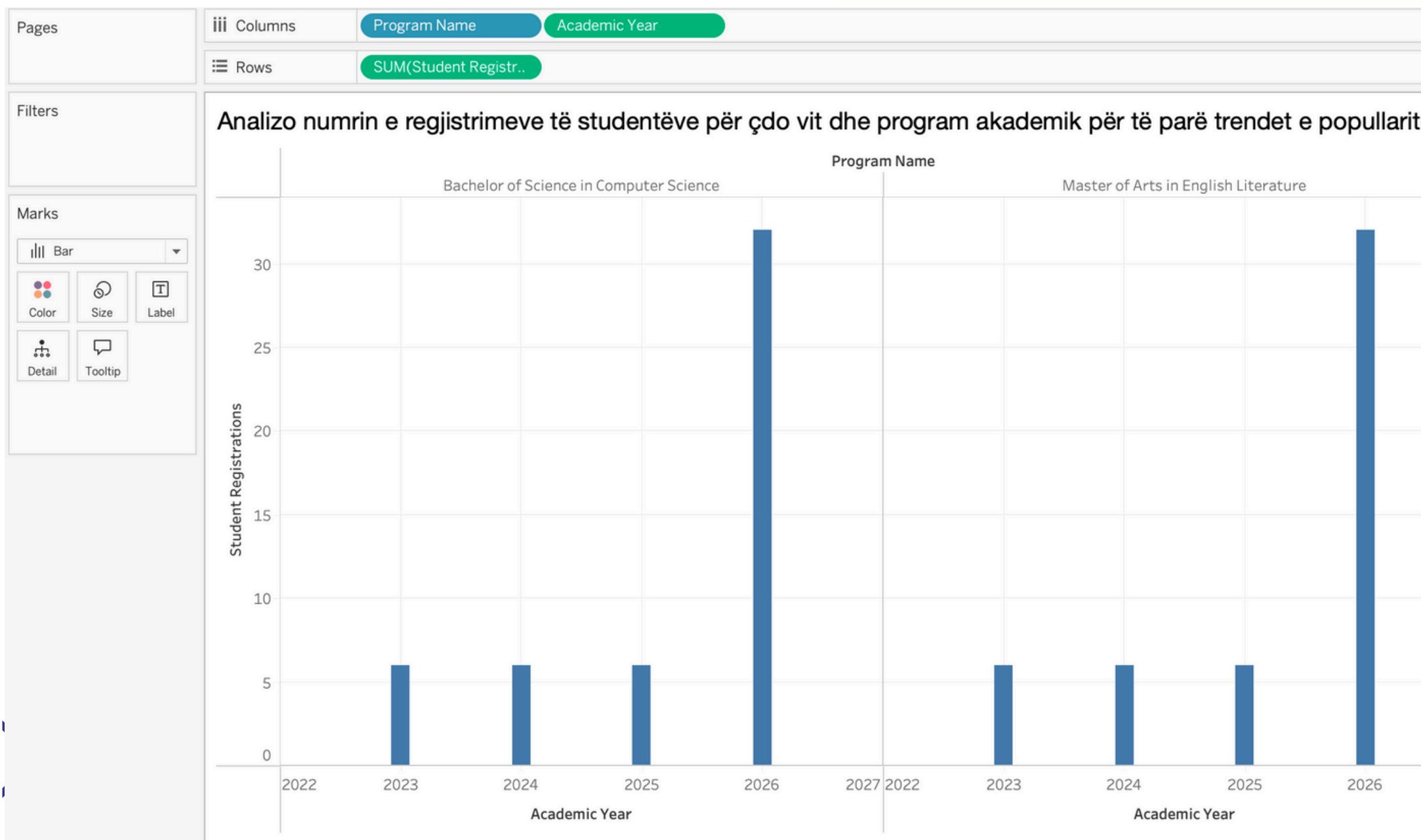


ANALIZO NUMRIN E REGJISTRIMEVE TË STUDENTËVE PËR ÇDO VIT DHE PROGRAM AKADEMIK

```
SELECT
    p.name AS program_name,
    t.academic_year,
    COUNT(t.student_id) AS student_registrations
FROM
    Taken t
JOIN
    Program p ON t.program_id = p.id
GROUP BY
    p.name, t.academic_year
ORDER BY
    t.academic_year, student_registrations DESC;
```



	program_name	academic_year	student_registrations
1	Bachelor of Science in Computer Science	2023	6
2	Master of Arts in English Literature	2023	6
3	Bachelor of Science in Computer Science	2024	6
4	Master of Arts in English Literature	2024	6
5	Bachelor of Science in Computer Science	2025	6
6	Master of Arts in English Literature	2025	6
7	Bachelor of Science in Computer Science	2026	32
8	Master of Arts in English Literature	2026	32



PËRFUNDIMI:

1. Monitorimi i Performancës Studentore:

Bazuar në analizën e të dhënave për këtë sektor, dalim në përfundimin se lënda më e vështirë për studentët është "Hyrje në Shkencën e Kompjuterëve" dhe ajo me më pak vështirësi është "Ligjërata në Art dhe Anglisht". Pra, vërehen probleme te studentët në lëndën e shkencave kompjuterike.

Trendet e evolucionit të programit:

Vihet re se ka një trend rritjeje të regjistrimeve në ciklin bachelor në programin “Shkenca Kompjuterike” dhe në ciklin master të programit “Arte dhe Letërsia Angleze”. Piku i regjistrimeve vërehet në vitin 2026.

Diversiteti dhe demografia: Vihen re një balancim i stafit të bazuar në kriterin e gjinisë, dhe mosha mesatare e këtij stafi akademik është 36 vjeç për femrat dhe 35 vjeç për meshkujt.

Në performancën akademike mes cikleve të studimit dhe rrjedhimisht programeve të tyre të studimit, dolëm në përfundimin se cikli Bachelori (Bachelor of Science in Computer Science) ka performancë më të lartë akademike vjetore, duke arritur notën mesatare vjetore prej 78 pikësh, e ndjekur nga cikli Master(Master of Arts in English Literature) me vetëm 69 pikë.



FALEMINDERIT!

