# **Database Fundamentals**

# **Tables output**

# Select \* from facturi.client;

	ID_Client	Nume_Client	Adresa	CUI
•	1	Emag	Str.Magazinelor	12567889
	2	Flanco	Str.Magazinelor	9898765
	3	Domo	Str.Magazinelor	657890
	4	H&M	Str.Fashion	567893
	5	Zara	Str.Fashion	213456
	7	Fabrica de bere	Str.Iasomiei	765431
	8	Masini	Str.Vitezei	765499
*	NULL	NULL	NULL	NULL

# Select \* from facturi.produs;

	ID_Produs	Nume_Produs	Cod_Produs	TVA
•	1	Rochie	23456789	0.24
	2	Masina de spalat	23456754	0.24
	3	Camasa	54367892	0.24
	4	Cos de rufe	34523452	0.24
	5	Desperados	34567090	0.09
	6	Uscator de par	65789321	0.24
	7	Pijamale	34234567	0.09
*	NULL	NULL	NULL	NULL

# Select \* from facturi.factura;

	ID_Factura	Data_Factura	Serie_Factura	ID_Client
•	1	2016-09-24	345609090	1
	2	2016-04-22	456787654	2
	3	2016-09-02	098752690	4
	4	2016-09-06	567893312	1
	5	2015-06-22	543667788	1
	6	2015-03-07	042445997	5
*	NULL	NULL	NULL	NULL

#### Select \* from facturi.detaliu\_factura;

	ID_DetaliuFactura	Pret	Cantitate	ID_Produs	ID_Factura
•	1	20	2	3	1
	2	40	4	2	1
	3	100	1	1	1
	4	300	3	4	2
	5	250	5	5	4
	6	20	3	3	2
	7	100	2	1	2
*	NULL	NULL	NULL	NULL	NULL

#### **SQL**

#### 1. Factura cu pretul cel mai mare

SELECT x.ID\_Factura, f.Serie\_Factura, f.Data\_factura, x.TotalFactura FROM (SELECT ID\_Factura, SUM(Pret\*Cantitate) as TotalFactura FROM facturi.detaliu\_factura GROUP BY ID\_Factura)x INNER JOIN facturi.factura f ON x.ID\_Factura = f.ID\_Factura WHERE TotalFactura = (SELECT MAX(x.TotalFactura) FROM (SELECT ID\_Factura, SUM(Pret\*Cantitate) as TotalFactura FROM facturi.detaliu\_factura GROUP BY ID\_Factura)x);

#### **Result:**

	ID_Factura	Serie_Factura	Data_factura	TotalFactura
•	4	567893312	2016-09-06	1250

#### 2. Produsul care are cele mai multe incasari

SELECT x.ID\_Produs, Nume\_Produs, IncasariProdus FROM ( SELECT ID\_Produs, SUM(Pret\*Cantitate) as IncasariProdus FROM facturi.detaliu\_factura GROUP BY ID\_Produs)x INNER JOIN facturi.produs p on x.ID\_Produs = p.ID\_Produs WHERE IncasariProdus = (SELECT MAX(x.IncasariProdus) FROM (SELECT SUM(Pret\*Cantitate) as IncasariProdus FROM facturi.detaliu\_factura GROUP BY ID\_Produs)x);

#### **Result:**

	ID_Produs	Nume_Produs	IncasariProdus
•	5	Desperados	1250

#### 3. Toți clinții și facturile lor

SELECT df.ID\_Factura, f.ID\_Client, c.Nume\_Client, SUM(Pret\*Cantitate) as TotalFactura FROM facturi.detaliu\_factura df INNER JOIN facturi.factura f ON df.ID\_Factura = f.ID\_Factura INNER JOIN facturi.client c ON f.ID\_Client = c.ID\_Client GROUP BY df.ID\_Factura;

#### **Result:**

	ID_Factura	ID_Client	Nume_Client	TotalFactura
•	1	1	Emag	300
	2	2	Flanco	1160
	4	1	Emag	1250

#### 4. Media vânzărilor pe lună

SELECT month(Data\_Factura) as Luna, SUM(TotalFactura)/count(x.ID\_Factura) as Media FROM (SELECT ID\_Factura, SUM(Pret\*Cantitate) as TotalFactura FROM facturi.detaliu\_factura GROUP BY ID\_Factura)x INNER JOIN facturi.factura on x.ID\_Factura = factura.ID\_Factura GROUP BY month(Data\_Factura);

#### **Result:**

	Luna	Media
•	4	1160
	9	775