

מסמך תלויות פונקציונליות

books

book_id	title
1	book_title_1
2	book_title_2
3	book_title_3
4	book_title_1

book_id \rightarrow title

author

author_id	forename	surname
12	forename1	surname1
47	forename1	surname1
55	forename3	surname3
93	forename4	surname4

author_id \rightarrow forename

author_id \rightarrow surname

books_author

author_id	book_id
12	1
47	1
47	3
93	4

(author_id \wedge book_id)

stock

store_book_id	book_id	book_condition	location
22	1	as-new	sold
23	1	good	storage
24	3	mint	store
25	4	good	sold

store_book_id → book_id

store_book_id → book_condition

store_book_id → location

payments

store_book_id	retail_price	transaction_id	purchase_price	date_bought
22	25	765	20	08.03.2018
23	20	NULL	15	10.03.2018
24	30	NULL	25	17.03.2018
25	20	765	15	22.03.2018

store_book_id → retail_price

store_book_id → transaction_id

store_book_id → purchase_price

store_book_id → date_bought

publication

publication_id	book_id	translator	publication_name	publication_year	weight	no_of_pages
223	1	Yossi Yosef	Top Prints	1997	0.5	100
245	17	Israel Israeli	Publishers inc.	2013	0.95	500
278	17	Ploni Almoni	Top Prints	1997	1.25	1300

211	10	Yossi Yosef	Books co.	2010	0.75	200
289	5	ORIGINAL	Top Prints	1998	0.6	120

publication_id → translator

publication_id → publication_name

publication_id → publication_year

publication_id → weight

publication_id → no_of_pages

publication_id → book_id

person

person_id	forename	surname	address
123	Yossi	Yosef	Herzel 5, Tel Aviv
234	Israel	Israeli	HaNassi 8, Rehovot
345	Ploni	Almoni	Bialik 20, Ramat Gan
456	Yossi	Almoni	Kakal 11, Herzliya

person_id → forename

person_id → surname

person_id → phone_number

person_id → address

phone_number

phone_id	phone_no
123	05266789
145	05266787
167	05266783
189	08-68868

phone_id → phone_no

person_phone_number

phone_id	person_id
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123	5266789
145	5266789
167	5266783
189	5266785

(phone_id \wedge person_id)

employee

employee_id	hire_date	termination_date	person_id
774	22.03.2017	NULL	123
775	12.09.2018	NULL	444
776	20.02.2019	01.07.2020	555
778	28.05.2019	NULL	456

employee_id \rightarrow hire_date

employee_id \rightarrow termination_date

employee_id \rightarrow person_id

person_id \rightarrow employee_id

salary

employee_id	monthly_payments	monthly_hours
774	07.2020	26
775	07.2020	30
776	06.2020	32
776	07.2020	31

(employee_id \wedge monthly_payments) \rightarrow monthly_hours

customer

customer_id	no_of_books_bought	person_id
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9676	20	455
9779	2	677
9865	13	899
9898	0	122

customer_id → no_of_books_bought

customer_id → person_id

person_id → customer_id

book_order

customer_id	books_id	order_date
9676	1	20.06.2020
9779	2	05.07.2020
9865	3	22.07.2020
9865	2	29.07.2020

(customer_id \wedge book_id) → order_date

store_transaction

transaction_id	employee_id	transaction_date	customer_id
1123	774	22.07.2020	12445
1134	775	27.07.2020	12446
1145	774	27.07.2020	12447
1156	778	30.07.2020	12448

transaction_id → employee_id

transaction_id → transaction_date

transaction_id → customer_id

payment

transaction_id	total_weight	payment_method	total_book_cost	delivery_cost
1123	2	bit	70	20

1134	3.5	bank transfer	120	30
1145	0.75	bit	20	10
1156	0.9	credit card	30	10

transaction_id → total_weight

transaction_id → payment_method

transaction_id → total_book_cost

transaction_id → delivery_cost

total_weight → delivery_cost

delivery

tracking_no	transaction_id	address	service_provider	delivery_method	delivery_status
0304	1123	address1	Israel Post	Messenger Post	Delivered
0306	1123	address2	Israel Post	Registered mail	Delivery in progress
0323	1145	address3	Xpress	Pick Up Point	Processing
0324	1156	address1	Israel Post	Express Messenger Post	Received

tracking_no → transaction_id

tracking_no → address

tracking_no → delivery_status

tracking_no → service_provider

tracking_no → delivery_method

service_provider → delivery_method

store

monthly_payment	monthly_wages	rent	misc
04.2020	70,000	6,000	180
05.2020	70,500	6,000	220
06.2020	70,000	6,000	200
07.2020	80,000	6,000	300

monthly_payment → monthly_wages

monthly_payment → rent
monthly_payment → misc

service_payments

monthly_payment	landline	mobile	Isreal_Post	Xpress
04.2020	180	170	1,600	1,800
05.2020	200	190	1,000	1,900
06.2020	190	170	1,100	1,500
07.2020	170	195	1,300	1,600

monthly_payment → landline
monthly_payment → mobile
monthly_payment → Isreal_Post
monthly_payment → Xpress

gov_payments

monthly_payment	property_tax	water	electric
04.2020	800	200	550
05.2020	800	190	500
06.2020	800	190	520
07.2020	800	210	480

monthly_payment → property_tax
monthly_payment → water
monthly_payment → electric