Task-1:

Write a query that will return sales details of all customers and products. The query should return all customers, even customers without invoices and also all products, even those products that were not sold. Print "N/A" for a null customer or product name, and 0 for a null quantity.

For each row return customer name, product name, and the quantity of the product sold. Order the result ascending by customer id, product id and invoice item id.

Table definitions and a data sample are given below.

Table: customer

column name	column type	key / NULL
id	int	PK
customer_name	varchar(255)	
city_id	int	FK
customer_address	varchar(255)	
contact_person	varchar(255)	N
email	varchar(128)	
phone	varchar(128)	

Table: product

column name	column type	key / NULL
id	int	PK
sku	varchar(32)	
product_name	varchar(128)	
product_description	text	
current_price	decimal(8,2)	
quantity_in_stock	int	

Table: invoice

column name	column type	key / NULL
id	int	PK
invoice_number	varchar(255)	
customer_id	int	FK
user_account_id	int	
total_price	decimal(8,2)	
time_issued	varchar(255)	N
time_due	varchar(255)	N
time_paid	varchar(255)	N
time_canceled	varchar(255)	N
time_refunded	varchar(255)	N

invoice.customer_id references customer.id

Table: invoice_item

column name	column type	key / NULL
id	int	PK
invoice_id	int	FK
product_id	int	FK
quantity	decimal(8,2)	
price	decimal(8,2)	
line_total_price	decimal(8,2)	

invoice_item.invoice_id references invoice.id
invoice_item.product_id references product.id

Table: invoice

id	invoice_number	customer_id	user_account_id	total_price	time_issued	time_due
1	in_25181b07ba800c8d2fc967fe991807d9	7	4	1436	7/20/2019 3:05:07 PM	7/27/2019 3:05:07 PM
2	8fba0000fd456b27502b9f81e9d52481	9	2	1000	7/20/2019 3:07:11 PM	7/27/2019 3:07:11 PM
3	3b6638118246b6bcfd3dfcd9be487599	3	2	360	7/20/2019 3:06:15 PM	7/27/2019 3:06:15 PM
4	dfe7f0a01a682196cac0120a9adbb550	5	2	1675	7/20/2019 3:06:34 PM	7/27/2019 3:06:34 PM
5	2a24cc2ad4440d698878a0a1a71f70fa	6	2	9500	7/20/2019 3:06:42 PM	7/27/2019 3:06:42 PM
6	cbd304872ca6257716bcab8fc43204d7	4	2	150	7/20/2019 3:08:15 PM	7/27/2019 3:08:15 PM

Table: product

id	sku	product_name	product_description	current_price	quantity_in_stock
1	330120	Game Of Thrones - URBAN DECAY	Game Of Thrones Eyeshadow Palette	65	122
2	330121	Advanced Night Repair - ESTEE LAUDER	Advanced Night Repair Synchronized Recovery Complex II	98	51
3	330122	Rose Deep Hydration - FRESH	Rose Deep Hydration Facial Toner	45	34
4	330123	Pore-Perfecting Moisturizer - TATCHA	Pore-Perfecting Moisturizer & Cleanser Duo	25	393
5	330124	Capture Youth - DIOR	Capture Youth Serum Collection	95	74
6	330125	Slice of Glow - GLOW RECIPE	Slice of Glow Set	45	40
7	330126	Healthy Skin - KIEHLS SINCE 1851	Healthy Skin Squad	68	154
8	330127	Power Pair! - IT COSMETICS	IT is Your Skincare Power Pair! Best-Selling Moisturizer & Eye Cream Duo	80	0
9	330128	Dewy Skin Mist - TATCHA	Limited Edition Dewy Skin Mist Mini	20	281
10	330129	Silk Pillowcase - SLIP	Silk Pillowcase Duo + Scrunchies Kit	170	0

Table: invoice_item

id	invoice_id	product_id	quantity	price	line_total_price
1	1	1	20	65	1300
2	1	7	2	68	136
3	1	5	10	100	1000
4	3	10	2	180	360
5	4	1	5	65	325
6	4	2	10	95	950
7	4	5	4	100	400
8	5	10	100	95	9500
9	6	4	6	25	150

The first line of the result should be:

customer_name product_name quantity

-> N/A Rose Deep Hydration - FRESH 0

Write MySQL code for (1) creating the tables, (2) entering the values in the tables (dummy values can be used) and then finally (3) the query as instructed above.

Task-2:

Write a query that will, for all products, return each product name with its amounts due, paid, canceled and refunded. Order the result by product name, ascending.

Table definitions and a data sample are given below.

Table: customer

column name	column type	key / NULL
id	int	PK
customer_name	varchar(255)	
city_id	int	FK
customer_address	varchar(255)	
contact_person	varchar(255)	N
email	varchar(128)	
phone	varchar(128)	

Table: product

column name	column type	key / NULL
id	int	PK
sku	varchar(32)	
product_name	varchar(128)	
product_description	text	
current_price	decimal(8,2)	
quantity_in_stock	int	

Table: invoice

column name	column type	key / NULL
id	int	PK
invoice_number	varchar(255)	
customer_id	int	FK
user_account_id	int	
total_price	decimal(8,2)	
time_issued	varchar(255)	N
time_due	varchar(255)	N
time_paid	varchar(255)	N
time_canceled	varchar(255)	N
time_refunded	varchar(255)	N

Table: invoice_item

column name	column type	key / NULL
id	int	PK
invoice_id	int	FK
product_id	int	FK
quantity	decimal(8,2)	
price	decimal(8,2)	
line_total_price	decimal(8,2)	

invoice_item.invoice_id references invoice.id
invoice_item.product_id references product.id

Write MySQL code for (1) creating the tables, (2) entering the values in the tables (dummy values can be used) and then finally (3) the query as instructed above.