

1.Buatlah query DDL untuk membuat semua tabel diatas!

\* CREATE DATABASE tugas;

Table Product : [[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) product( product\_id [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL AUTO\_INCREMENT, product\_name [varchar](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-types.html)(255) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, price [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, created\_at [datetime](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/date-and-time-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, updated\_at [datetime](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/date-and-time-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, PRIMARY KEY (product\_id) )

]

Table User : [[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) users( user\_id [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL AUTO\_INCREMENT, username [varchar](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-types.html)(255) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, passwords [varchar](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-types.html)(255) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, created\_at [datetime](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/date-and-time-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, updated\_at [datetime](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/date-and-time-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, PRIMARY KEY (user\_id))]

Table transaction : [[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) transaction( transaction\_id [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL AUTO\_INCREMENT, user\_id [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, total\_price [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, created\_at [datetime](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/date-and-time-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, updated\_at [datetime](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/date-and-time-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL, PRIMARY KEY (transaction\_id) )]

Table transaction\_product : [[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) transaction\_product( transaction\_id [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html), product\_id [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html), quantity [int](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/numeric-types.html) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html#operator_not) NULL )]

2. Buatlah query DDL untuk mendefinisikan constraint tabel (primary key dan relasi) berdasarkan diagram diatas!

[[ALTER](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) transaction\_product ADD CONSTRAINT FK\_detailproduct FOREIGN KEY (product\_id) REFERENCES product(product\_id)

[[ALTER](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) transaction\_product ADD CONSTRAINT FK\_transproduct FOREIGN KEY (transaction\_id) REFERENCES transaction(transaction\_id)]

[ALTER](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) transaction ADD CONSTRAINT FK\_usertrans FOREIGN KEY (user\_id) REFERENCES users(user\_id)

3. Buatlah query-query yang digunakan untuk melakukan: (data disediakan di lampiran)

a. Memasukkan data user berdasarkan data yang disediakan

-[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO users [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html#function_values) (100,'andi','andi123','2022-08-27','2022-08-28'),(200,'budi','budi\_ganteng999','2022-08-27','2022-08-28')

b. Memasukkan data produk berdasarkan data yang disediakan

- [INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO product [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html#function_values) (10,'baju',67000,'2022-08-17','2022-08-17'), (20,'celana',86000,'2022-08-18','2022-08-18'), (30,'buku',24000,'2022-08-19','2022-08-19'), (40,'sepatu',128000,'2022-08-20','2022-08-20'),(50,'sepeda',1500000,'2022-08-21','2022-08-21'),(60,'bola',17000,'2022-08-22','2022-08-22'),(70,'komputer',8956000,'2022-08-23', '2022-08-23'),(80,'gelas',96400,'2022-08-24', '2022-08-24')

c. Memasukkan data transaksi berdasarkan data yang disediakan

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO transaction [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html#function_values) (1,100,392000,'2022-08-15','2022-08-15'),(2,200,9084000,'2022-08-16','2022-08-16'),(3,200,440000,'2022-08-19','2022-08-19'),(4,100,448800,'2022-08-24','2022-08-24')

d. Memasukkan data detail transaksi berdasarkan data yang disediakan

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO transaction\_product [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html#function_values) (1,10,2),(1,20,3), (2,70,1),(2,40,1),(3,20,4),(3,30,4),(4,80,2),(4,40,2)

e. Mengubah jumlah pembelian gelas oleh user andi menjadi 1 (note: gunakan sub-

query)

[UPDATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/update.html) transaction\_product [SET](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/set.html) quantity = 1 WHERE product\_id [IN](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html#function_in) ([SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) product\_id FROM transaction\_product WHERE product\_id = 80)

  f. Menghapus 1 data produk yang memiliki harga terendah (note: gunakan sub-

query)

[DELETE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/delete.html) FROM product WHERE price = ([SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [MIN](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html#function_min)(price) FROM product )

4. Buatlah query yang dapat menampilkan halaman ke 2 dari data produk termurah yang memiliki harga diatas Rp 50.000,00 dimana setiap halamannya berisi 3 data!

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM product WHERE price > 50000 LIMIT 3

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM product WHERE price > 50000 LIMIT 3,3

5. Buatlah query yang menampilkan:

a. Total transaksi per user (note: banyak baris sama dengan banyak user)

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) user\_id, [SUM](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html#function_sum)(total\_price) AS hasil\_total from transaction GROUP BY user\_id

b. List produk yang telah diurutkan dari yang paling banyak dibeli (note: berisikan minimal nama produk dan banyak pembelian)

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) product\_id, [SUM](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html#function_sum)(quantity) AS total\_pembelian FROM transaction\_product GROUP BY product\_id ORDER BY [COUNT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html#function_count)(product\_id) DESC