**NOMOR 1 : dm\_sales**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_sales (

month\_sales **CHAR**(7) **NOT** **NULL**,

total\_sales INT **NOT** **NULL**,

**PRIMARY** **KEY** (month\_sales)

);

**INSERT** **INTO** dm\_sales (month\_sales, total\_sales )

**SELECT**

**TO\_CHAR**(order\_date, **'MM'**) **AS** month\_sales,

**SUM**(oi.order\_item\_quantity \* oi.product\_price) **AS** total\_sales

**FROM**

fact\_orders o

**JOIN**

fact\_order\_items oi **ON** o.order\_id = oi.order\_id

**GROUP** **BY**

**TO\_CHAR**(order\_date, **'MM'**)

**ORDER** **BY**

month\_sales;

**NOMOR 2 : dm\_product\_sales\_2**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_product\_sales\_2 (

product\_category\_id INT **NOT** **NULL**,

product\_category\_name **VARCHAR**(255) **NOT** **NULL**,

total\_sales INT **NOT** **NULL**,

**PRIMARY** **KEY** (product\_category\_id),

**FOREIGN** **KEY** (product\_category\_id) **REFERENCES** dim\_product\_category(product\_category\_id)

);

**INSERT** **INTO** ***dm\_product\_sales\_2*** (***product\_category\_id***, ***product\_category\_name***, ***total\_sales***)

**SELECT**

*p*.***product\_category\_id***,

*c*.***product\_category\_name***,

**SUM**(*oi*.***order\_item\_quantity*** \* *oi*.***product\_price***) **AS** *total\_sales*

**FROM**

***dim\_products*** *p*

**JOIN**

***dim\_product\_category*** *c* **ON** *p*.***product\_category\_id*** = *c*.***product\_category\_id***

**JOIN**

***fact\_order\_items*** *oi* **ON** *p*.***product\_id*** = *oi*.***product\_id***

**GROUP** **BY**

*p*.***product\_category\_id***, *c*.***product\_category\_name***;

**NOMOR 3 : dm\_payment\_sales\_3**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_payment\_sales\_3 (

payment\_id INT **NOT** **NULL**,

payment\_name **VARCHAR**(255) **NOT** **NULL**,

total\_sales INT **NOT** **NULL**,

**PRIMARY** **KEY** (payment\_id),

**FOREIGN** **KEY** (payment\_id) **REFERENCES** dim\_payments(payment\_id)

);

**INSERT** **INTO** ***dm\_payment\_sales\_3*** (***payment\_id***, ***payment\_name***, ***total\_sales***)

**SELECT**

*o*.***payment\_id***,

*p*.***payment\_name***,

**SUM**(*o*.***order\_total***) **AS** *total\_sales*

**FROM**

***fact\_orders*** *o*

**JOIN**

***dim\_payments*** *p* **ON** *o*.***payment\_id*** = *p*.***payment\_id***

**GROUP** **BY**

*o*.***payment\_id***, *p*.***payment\_name***;

**NOMOR 4 : dm\_shipper\_sales\_4**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_shipper\_sales\_4 (

shipper\_id INT **NOT** **NULL**,

shipper\_name **VARCHAR**(255) **NOT** **NULL**,

total\_sales INT **NOT** **NULL**,

**PRIMARY** **KEY** (shipper\_id),

**FOREIGN** **KEY** (shipper\_id) **REFERENCES** dim\_shippers(shipper\_id)

);

**INSERT** **INTO** ***dm\_shipper\_sales\_4*** (***shipper\_id***, ***shipper\_name***, ***total\_sales***)

**SELECT**

*o*.***shipper\_id***,

*s*.***shipper\_name***,

**SUM**(*o*.***order\_total***) **AS** *total\_sales*

**FROM**

***fact\_orders*** *o*

**JOIN**

***dim\_shippers*** *s* **ON** *o*.***shipper\_id*** = *s*.***shipper\_id***

**GROUP** **BY**

*o*.***shipper\_id***, *s*.***shipper\_name***;

**NOMOR 5 : dm\_user\_sales\_5**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_user\_sales\_5 (

user\_id INT **NOT** **NULL**,

user\_first\_name **VARCHAR**(255) **NOT** **NULL**,

user\_last\_name **VARCHAR**(255) **NOT** **NULL**,

total\_sales INT **NOT** **NULL**,

**PRIMARY** **KEY** (user\_id),

**FOREIGN** **KEY** (user\_id) **REFERENCES** dim\_users(user\_id)

);

**INSERT** **INTO** ***dm\_user\_sales\_5*** (***user\_id***, ***user\_first\_name***, ***user\_last\_name***, ***total\_sales***)

**SELECT**

*u*.***user\_id***,

*u*.***user\_first\_name***,

*u*.***user\_last\_name***,

**SUM**(*o*.***order\_total***) **AS** *total\_sales*

**FROM**

***dim\_users*** *u*

**JOIN**

***fact\_orders*** *o* **ON** *u*.***user\_id*** = *o*.***user\_id***

**GROUP** **BY**

*u*.***user\_id***, *u*.***user\_first\_name***, *u*.***user\_last\_name***;

**NOMOR 6 : dm\_discount\_voucher\_trend\_6**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_discount\_voucher\_trend\_6 (

trend\_id SERIAL **PRIMARY** **KEY**,

trend\_date **DATE** **NOT** **NULL**,

discount\_amount INT **NOT** **NULL**,

voucher\_amount INT **NOT** **NULL**

);

**INSERT** **INTO** ***dm\_discount\_voucher\_trend\_6*** (***trend\_date***, ***discount\_amount***, ***voucher\_amount***)

**SELECT**

**DATE\_TRUNC**(**'month'**, *o*.***order\_date***) **AS** *trend\_date*,

**SUM**(*o*.***order\_discount***) **AS** *discount\_amount*,

**SUM**(*voucher*.***voucher\_price***) **AS** *voucher\_amount*

**FROM**

***fact\_orders*** *o*

**LEFT** **JOIN**

***dim\_voucher*** *voucher* **ON** *o*.***voucher\_id*** = *voucher*.***voucher\_id***

**GROUP** **BY**

*trend\_date*;

**NOMOR 7 : dm\_sales\_performance\_by\_region\_7**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_sales\_performance\_by\_region\_7 (

region **VARCHAR**(255) **NOT** **NULL**,

total\_sales INT **NOT** **NULL**,

**PRIMARY** **KEY** (region)

);

**INSERT** **INTO** ***dm\_sales\_performance\_by\_region\_7*** (***region***, ***total\_sales***)

**SELECT**

*u*.***user\_address*** **AS** *region*,

**SUM**(*o*.***order\_total***) **AS** *total\_sales*

**FROM**

***fact\_orders*** *o*

**JOIN**

***dim\_users*** *u* **ON** *o*.***user\_id*** = *u*.***user\_id***

**GROUP** **BY**

*u*.***user\_address***;

**NOMOR 8 : dm\_profit\_margin\_per\_category\_8**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_profit\_margin\_per\_category\_8 (

category\_id INT **NOT** **NULL** **PRIMARY** **KEY**,

category\_name **VARCHAR**(255) **NOT** **NULL**,

total\_sales INT **NOT** **NULL**,

total\_cost INT **NOT** **NULL**,

total\_profit INT **NOT** **NULL**

);

**INSERT** **INTO** ***dm\_profit\_margin\_per\_category\_8*** (***category\_id***, ***category\_name***, ***total\_sales***, ***total\_cost***, ***total\_profit***)

**SELECT**

*pc*.***product\_category\_id*** **AS** *category\_id*,

*pc*.***product\_category\_name*** **AS** *category\_name*,

**SUM**(*oi*.***product\_price*** \* *oi*.***order\_item\_quantity***) **AS** *total\_sales*,

**SUM**(*oi*.***product\_subprice*** \* *oi*.***order\_item\_quantity***) **AS** *total\_cost*,

**SUM**((*oi*.***product\_price*** - *oi*.***product\_subprice***) \* *oi*.***order\_item\_quantity***) **AS** *total\_profit*

**FROM**

***fact\_order\_items*** *oi*

**JOIN**

***dim\_products*** *p* **ON** *oi*.***product\_id*** = *p*.***product\_id***

**JOIN**

***dim\_product\_category*** *pc* **ON** *p*.***product\_category\_id*** = *pc*.***product\_category\_id***

**GROUP** **BY**

*pc*.***product\_category\_id***, *pc*.***product\_category\_name***;

**NOMOR 9 : dm\_average\_order\_value\_per\_user\_9**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_average\_order\_value\_per\_user\_9 (

user\_id INT **NOT** **NULL** **PRIMARY** **KEY**,

user\_first\_name **VARCHAR**(255) **NOT** **NULL**,

user\_last\_name **VARCHAR**(255) **NOT** **NULL**,

average\_order\_value **NUMERIC**(10, 2) **NOT** **NULL**

);

**INSERT** **INTO** ***dm\_average\_order\_value\_per\_user\_9*** (***user\_id***, ***user\_first\_name***, ***user\_last\_name***, ***average\_order\_value***)

**SELECT**

*u*.***user\_id***,

*u*.***user\_first\_name***,

*u*.***user\_last\_name***,

**AVG**(*fo*.***order\_total***) **AS** *average\_order\_value*

**FROM**

***dim\_users*** *u*

**JOIN**

***fact\_orders*** *fo* **ON** *u*.***user\_id*** = *fo*.***user\_id***

**GROUP** **BY**

*u*.***user\_id***, *u*.***user\_first\_name***, *u*.***user\_last\_name***;

**NOMOR 10 : dm\_voucher\_conversion\_rate\_10**

**CREATE** **TABLE** **IF** **NOT** **EXISTS** dm\_voucher\_conversion\_rate\_10 (

voucher\_id INT **NOT** **NULL** **PRIMARY** **KEY**,

voucher\_name **VARCHAR**(255) **NOT** **NULL**,

total\_orders\_with\_voucher INT **NOT** **NULL**,

total\_orders\_without\_voucher INT **NOT** **NULL**,

conversion\_rate **NUMERIC**(5, 2) **NOT** **NULL**

);

**INSERT** **INTO** ***dm\_voucher\_conversion\_rate\_10*** (***voucher\_id***, ***voucher\_name***, ***total\_orders\_with\_voucher***, ***total\_orders\_without\_voucher***, ***conversion\_rate***)

**SELECT**

*v*.***voucher\_id***,

*v*.***voucher\_name***,

**COALESCE**(**COUNT**(*fo*.***order\_id***), 0) **AS** *total\_orders\_with\_voucher*,

(**SELECT** **COUNT**(\*) **FROM** ***fact\_orders*** **WHERE** ***voucher\_id*** **IS** **NULL**) **AS** *total\_orders\_without\_voucher*,

**CASE**

**WHEN** **COUNT**(*fo*.***order\_id***) > 0 **THEN** (**COUNT**(*fo*.***order\_id***)::**NUMERIC** / (**COUNT**(*fo*.***order\_id***) + (**SELECT** **COUNT**(\*) **FROM** ***fact\_orders*** **WHERE** ***voucher\_id*** **IS** **NULL**))::**NUMERIC**) \* 100

**ELSE** 0

**END** **AS** *conversion\_rate*

**FROM**

***dim\_voucher*** *v*

**LEFT** **JOIN**

***fact\_orders*** *fo* **ON** *v*.***voucher\_id*** = *fo*.***voucher\_id***

**GROUP** **BY**

*v*.***voucher\_id***, *v*.***voucher\_name***;