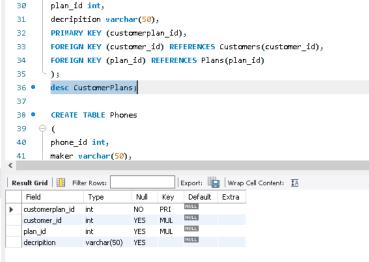
```
Q1
       use Minproject;
        ^{\prime *} Write SQL statements to create all tables in the final normalized ERD in Task 4.2C. ^{*\prime}
        customer_id int,
        name varchar(60),
        address varchar(100),
        phone_num varchar(20),
email varchar(20),
        PRIMARY KEY (customer_id)
 12
        desc Customers;
14
Result Grid | III Filter Rows:
                                 Export: 📳 | Wrap Cell Content: 🏗
                        Null Key
NO PRI
Field Type Null
customer_id int NO
name varchar(60) VES

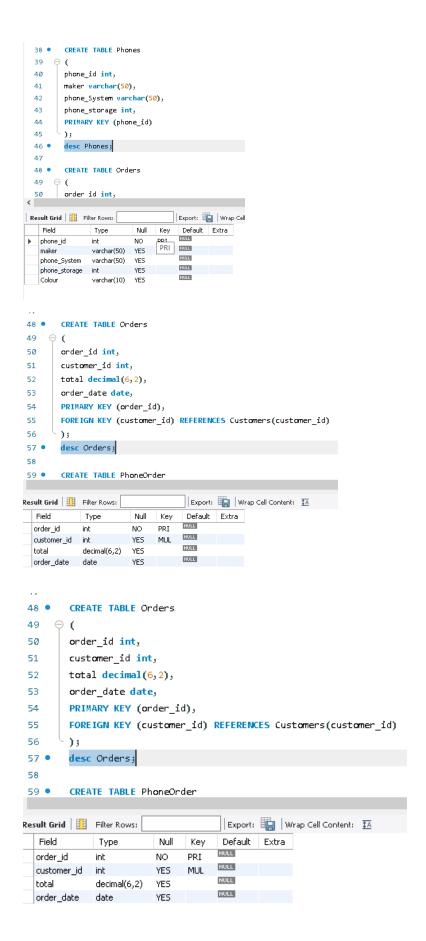
        address
        varchar(100)
        YES

        phone_num
        varchar(20)
        YES

        email
        varchar(20)
        YES

  15 •
             CREATE TABLE Plans
  16 ⊖ (
   17
             plan_id int,
  18
             plan_name warchar(50),
             data_speed int,
  19
   20
             limit data int,
   21
             cost decimal(6,2),
             PRIMARY KEY (plan_id)
   22
   23
  24 •
             desc Plans;
  25
            CREATE TABLE CustomerPlans
                                                    Export: 📳 | Wrap Cell Content: 🏗
 Result Grid | III Filter Rows:
                                                    Default Extra
     Field
                    Туре
                                   Null
                                           Key
                                                  NULL
   plan_id
                    int
                                   NO
                                           PRI
                                                  NULL
                    varchar(50)
    plan_name
                                   YES
                                                  NULL
     data_speed
                   int
                                   YES
                                                  NULL
     limit_data
                   int
                                   YES
    cost
                    decimal(6,2) YES
      26 •
                 CREATE TABLE CustomerPlans
      27
             ⊖ (
      28
                 customerplan_id int,
      29
                 customer_id int,
      30
                 plan_id int,
      31
                 decripition varchar(50),
                 PRIMARY KEY (customerplan_id),
      32
       33
                 FOREIGN KEY (customer_id) REFERENCES Customers(customer_id),
                 FOREIGN KEY (plan_id) REFERENCES Plans(plan_id)
      34
      35
       36 •
                 desc CustomerPlans;
```





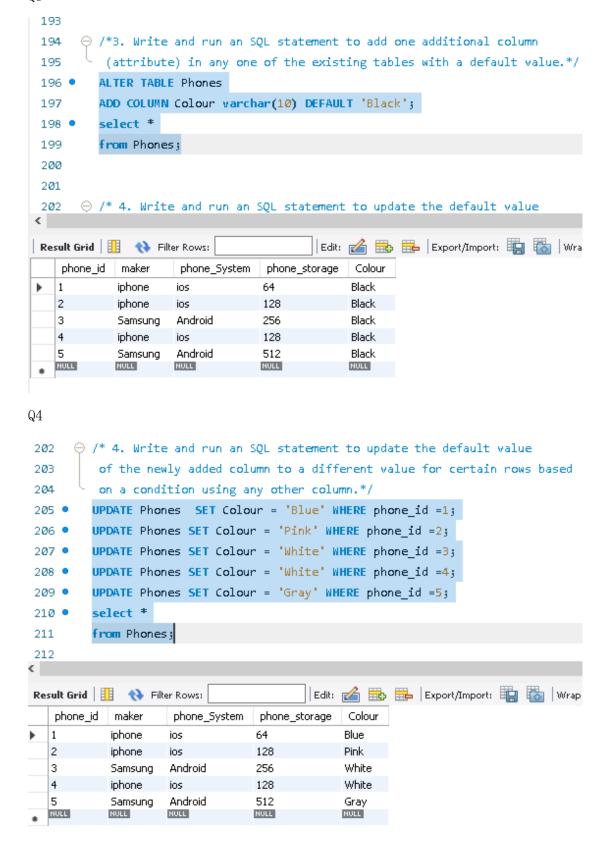
```
71 •
         CREATE TABLE Returns
  72
      ⊖ (
         return_id int,
  73
          customer_id int,
  75
          order_id int,
         return_reason warchar(50),
  76
  77
          PRIMARY KEY(return_id),
          FOREIGN KEY (order_id) REFERENCES Orders(order_id),
  78
          FOREIGN KEY (customer_id) REFERENCES Customers(customer_id)
  79
  80
          desc Returns;
  81 •
  82
  83 •
          CREATE TABLE Payments
 Result Grid | | Filter Rows:
                                       Export: 📳 | Wrap Cell Content: 🏗
                                       Default Extra
   Field
                 Туре
   return_id
                           NO
                                       NULL
   customer_id
                            YES
                                 MUL
                                       NULL
   order_id
                                       NULL
   return_reason varchar(50) YES
  83 •
          CREATE TABLE Payments
      ⊖ (
  84
          payment_id int,
  85
  86
          order_id int,
  87
          customer_id int,
          payment_method varchar(50),
  88
  89
          PRIMARY KEY(payment_id),
  90
          FOREIGN KEY (order_id) REFERENCES Orders(order_id),
         FOREIGN KEY (customer_id) REFERENCES Customers(customer_id)
  91
  92
  93 •
          desc Payments;
  94
          CREATE TABLE Invoices
| Export: 📳 | Wrap Cell Content: 🏗
   Field
                   Туре
                                          Default Extra
                              Null
                                    Key
                                          NULL
                              NO
                                    PRI
   payment_id
                   int
                                         NULL
                              YES
                                    MUL
   order id
                  int
                                          NULL
   customer id
                   int
                              YES
                                    MUL
                                          NULL
   payment_method varchar(50) YES
        CREATE TABLE Invoices
 95 •
         invoice_id int,
 97
 98
        payment_id int,
        price decimal(6,2),
 99
100
         invoice_date date,
101
         Invoices_tax varchar(50),
102
         PRIMARY KEY(invoice_id),
103
         FOREIGN KEY (payment_id) REFERENCES Payments(payment_id)
104
105 •
         desc Invoices;
106
107
         /* Q2. Insert at least FIVE records in each table using SQL. */
                                    Export: Wrap Cell Content: 🖽
Result Grid | | Filter Rows:
   Field
              Туре
                         Null
                                    Default Extra
                               Key
                                    NULL
                         NO
                               PRI
  invoice_id
              int
                              MUL NULL
                         YES
  payment_id
   price
              decimal(6,2)
                         YES
                                    NULL
   invoice date date
                         YES
                                    NULL
  Invoices tax varchar(50)
                        YES
```

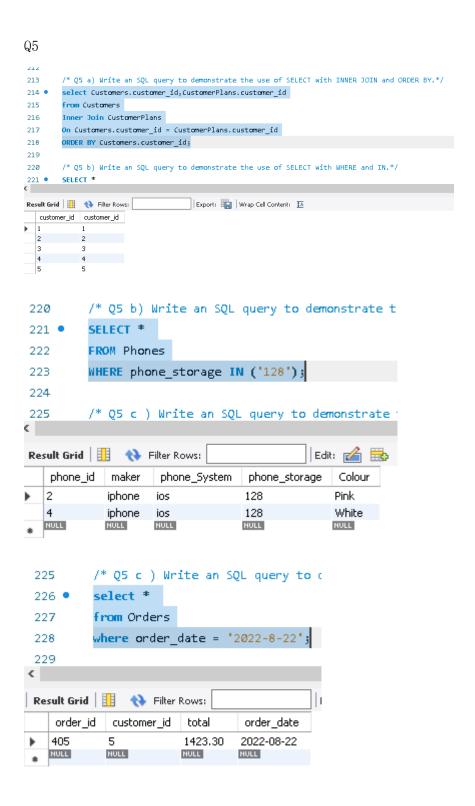
```
Q2
107
        /* Q2. Insert at least FIVE records in each table using SQL. */
109
        INSERT INTO Customers VALUES('1', 'Bryson', '33 Thomas st, Hampton', '0433937583', 'bryson@gmail.com');
        INSERT INTO Customers VALUES('2', 'Amber', '446 Elizabeth st, Melbourne', '0428457482', 'amber@gmail.com');
110 •
        INSERT INTO Customers VALUES('3', 'Tom', '915 collins st', '0423485984', 'tom@gmail.com');
111
        INSERT INTO Customers VALUES('4', 'Yi', '639 little lonsdale st', '0433936599', 'yi@gmail.com');
112 •
113 •
        INSERT INTO Customers VALUES('5', 'Yiu', '200 Spencer st', '0423435923', 'yiu@gmail.com');
114
        select *
115 •
116
        from Customers;
117
Result Grid 🔢 🚷 Filter Rows:
                                    | Edit: 🚄 🖶 🖶 | Export/Import: 🏣 🌇 | Wrap Cell Content: 🖽
   customer id name
                 address
                                      phone num email
                   33 Thomas st,Hampton
                                     0433937583
                                               bryson@gmail.com
            Bryson
            Amher
                  446 Elizabeth st, Melbourne
                                     0428457482 amber@gmail.com
                                               tom@gmail.com
            Yi
                  639 little lonsdale st
                                     0433936599 yi@gmail.com
                  200 Spencer st
                                     0423435923
                                              yiu@gmail.com
  5
NULL
 119
            /* Plans row */
            INSERT INTO Plans VALUES('201', 'Base plan ',' 20', '40', '58.9');
 120 •
            INSERT INTO Plans VALUES('202', 'Essential plan', '50', '180', '68.9');
 121 •
 122 •
            INSERT INTO Plans VALUES('203', 'Base plan', '20', '40', '59.9');
            INSERT INTO Plans VALUES('204', 'Preminum plan', '100', '300', '89.9');
 123 •
            INSERT INTO Plans VALUES('205', 'Premium plan', '100', '300', '89.9');
 124 •
            select *
 125 •
 126
            from Plans;
 127
 128
            /* CustomersPlans row */
 129 •
            INSERT INTO CustomerPlans VALUES('301', '1', '201', 'No lock-in contract
<
 Result Grid 🔠 🚷 Filter Rows:
                                                  | Edit: 🚄 🖶 🖶 | Export/Import: 🏭 🐻 | V
     plan_id | plan_name
                             data_speed
                                          limit data
                                                     cost
    201
              Base plan
                            20
                                          4Π
                                                    58.90
    202
             Essential plan
                                                    68.90
                            50
                                         180
     203
             Base plan
                            20
                                         40
                                                    59,90
     204
             Preminum plan
                            100
                                         300
                                                    89.90
    205
             Premium plan
                            100
                                         300
                                                    89.90
    NULL
                                                    NULL
 128
            /* CustomersPlans row */
 129 •
            INSERT INTO CustomerPlans VALUES('301', '1', '201', 'No lock-in contract');
            INSERT INTO CustomerPlans VALUES('302', '3', '203', 'No lock-in contract');
 130 •
 131 •
            INSERT INTO CustomerPlans VALUES('303','5','205','No lock-in contract');
            INSERT INTO CustomerPlans VALUES('304', '4', '204', 'No lock-in contract');
 132 •
            INSERT INTO CustomerPlans VALUES('305','2','202','No lock-in contract');
 133 •
 134
 135 •
            select *
            from CustomerPlans;
 136
 137
            /* Orders row */
 138
 139 •
           INSERT INTO Orders VALUES('401','1','1323.3','2022-8-29');
 | Edit: 🚄 🖶 🖶 | Export/Import: 🏣 🐻 | Wrap Cell
     customerplan_id
                     customer_id
                                  plan_id
                                           decripition
    301
                                  201
                                           No lock-in contract
    302
                     3
                                           No lock-in contract
    303
                     5
                                  205
                                           No lock-in contract
    304
                     4
                                  204
                                           No lock-in contract
    305
                                  202
                                           No lock-in contract
                     NULL
                                 NULL
```

```
137
  138
          /* Orders row */
  139 •
          INSERT INTO Orders VALUES('401','1','1323.3','2022-8-29');
  140 •
          INSERT INTO Orders VALUES('402','4','1523.3','2022-8-31');
          INSERT INTO Orders VALUES('403', '2', '1523.3', '2022-9-3');
  141 •
          INSERT INTO Orders VALUES('404','3','1323.3','2022-8-12');
 142 •
  143 •
          INSERT INTO Orders VALUES('405','5','1423.3','2022-8-22');
  144
  145 •
          select *
  146
          from Orders;
 147
          /* Phones row */
  148
 Result Grid 🔠 💎 Filter Rows:
                                          Edit: 🚄 🖶 🖶 Export/Import: 识
    order_id
            customer_id total
   401
                       1323,30
                               2022-08-29
    402
                              2022-08-31
                       1523.30
    403
                       1523,30
                               2022-09-03
    404
            3
                      1323.30
                              2022-08-12
                      1423.30
NULL
    405
                              2022-08-22
            NULL
148
           /* Phones row */
           INSERT INTO Phones VALUES('1', 'iphone', 'ios', '64');
149 •
150 •
           INSERT INTO Phones VALUES('2', 'iphone', 'ios', '128');
151 •
           INSERT INTO Phones VALUES('3', 'Samsung', 'Android', '256');
152 •
           INSERT INTO Phones VALUES('4', 'iphone', 'ios', '128');
153 •
           INSERT INTO Phones VALUES('5', 'Samsung', 'Android', '512');
154
           select *
155 •
156
           from Phones;
157
<
Edit: 🚄 🖶 🖶 Export/Import
    phone_id
              maker
                         phone_System
                                        phone_storage
                                                       Colour
              iphone
                        ios
   2
              iphone
                        ios
                                       128
                                                       Yellow
   3
              Samsung
                        Android
                                       256
                                                       Pink
   4
                                       128
                                                       Gray
              iphone
                        ios
                        Android
                                       512
                                                       Blue
              Samsung
             NULL
                                                      NULL
 158
          /* PhoneOrders row */
 159 •
          INSERT INTO PhoneOrder VALUES('101', '401', '1', '859.9');
          INSERT INTO PhoneOrder VALUES('102', '402', '2', '1259.9');
 160 •
 161 •
          INSERT INTO PhoneOrder VALUES('103', '403', '3', '1459.9');
 162 •
          INSERT INTO PhoneOrder VALUES('104', '404', '4', '1259.9');
          INSERT INTO PhoneOrder VALUES('105', '405', '5', '1859.9');
 163 •
          select *
 164 •
          from PhoneOrder;
 165
 166
<
                                            |Edit: 🚄 🖶 🖶 | Export/Import: 🏣 🐻
 Result Grid | III 🔷 💎 Filter Rows:
    phoneorder_id
                 order id
                          phone id
                                    price
   101
                 401
                                    859.90
                                   1259.90
   102
                 402
                          2
   103
                 403
                                   1459.90
                          4
                                   1259.90
   104
                 404
                405
NULL
   105
                                   1859.90
                         NULL
                                   NULL
   NULL
```

```
167
         /* Returns row */
         INSERT INTO Returns VALUES('10','5','401','The customer ordered the wrong product or size');
 168 •
         INSERT INTO Returns VALUES('11','1','402','The merchant shipped the wrong product or size');
         INSERT INTO Returns VALUES('12','2','403','The product was damaged or defective');
 170 •
         INSERT INTO Returns VALUES('13', '4', '404', 'The product arrived too late. ...');
 171 •
         INSERT INTO Returns VALUES('14','3','405','The product arrived too late. ...');
 172 •
         select *
 173 •
         from Returns;
 174
  175
 Result Grid 📗 💎 Filter Rows:
                                    | Edit: 🚄 🖶 🖶 | Export/Import: 🏣 🐌 | Wrap Cell Content: 🏗
    return_id customer_id order_id return_reason
   10
                     401
                            The customer ordered the wrong product or size
   11
                    402
                            The merchant shipped the wrong product or size
   12
                     403
                            The product was damage The product was damaged or defective
   13
                    404
                            The product arrived too late. .
                    405
NULL
                            The product arrived too late, ...
           3
NULL
   NULL
  176
             /* Payments now */
  177 •
             INSERT INTO Payments VALUES('101', '405', '1', 'debit');
             INSERT INTO Payments VALUES('102', '403', '4', 'debit');
  178 •
             INSERT INTO Payments VALUES('103', '402', '3', 'cash');
  179 •
  180 •
              INSERT INTO Payments VALUES('104', '401', '2', 'debit');
  181 •
             INSERT INTO Payments VALUES('105', '404', '5', 'debit');
             select *
  182 •
             from Payments;
  183
  184
 < ∣
 Result Grid
                    Filter Rows:
                                                        Edit: 🚄 🖶 🖶 Export/Ir
                                            payment_method
                    order_id
      payment_id
                              customer_id
     101
                   405
                              1
                                            debit
      102
                   403
                              4
                                            debit
     103
                   402
                              3
                                            cash
      104
                   401
                              2
                                            debit
     105
                   404
                              5
                                            debit
     NULL
  .
 184
 185
           /* Invoices row */
           INSERT INTO Invoices VALUES('10001', '101', '1900', '2022-8-29', '50');
 186 •
           INSERT INTO Invoices VALUES('10002', '102', '1700', '2022-8-21', '90');
 187 •
           INSERT INTO Invoices VALUES('10003','103','2100','2022-8-27','100');
 188 •
           INSERT INTO Invoices VALUES('10004', '104', '1500', '2022-8-28', '60');
 189 •
 190 •
           INSERT INTO Invoices VALUES('10005', '105', '1800', '2022-8-26', '30');
           select *
 191 •
192
           from Invoices;
193
<
Edit: 🚄 🖶 🖶 | Export/Import: 📳 🐻 | Wraj
               payment_id
                                      invoice_date
                                                   Invoices_tax
    10001
               101
                           1900.00
                                     2022-08-29
                                                   50
    10002
               102
                           1700.00
                                     2022-08-21
                                                   90
    10003
                           2100.00
                                     2022-08-27
                                                   100
               103
    10004
               104
                           1500.00
                                     2022-08-28
                                                  60
    10005
               105
                           1800.00
                                     2022-08-26
                                                   30
   NULL
              NULL
                           NULL
                                     NULL
                                                  NULL
```

```
Q3
```





```
231 \ominus /* d) Write an SQL statement to create a VIEW using a SELECT statement with a JOIN.
         Provide the statement to create the VIEW you want and demonstrate
 232
         the output of the VIEW using 'SELECT * FROM <viewname>;'*/
 233
 234 •
         create view view_Orders(view_order_id, view_customer_id,view_total, view_order_date)
         as select order_id,customer_id,total,order_date from Orders;
 235
236 •
         SELECT * FROM view_Orders JOIN Payments
 237
 238
<
Result Grid 🔢 💎 Filter Rows:
                                        Export: 📳 | Wrap Cell Content: 🏗
   view_order_id view_customer_id view_total
                                       1423.30
                                       2022-08-22
                                                               405
  405
               5
                                                     101
                                                                       1
                                                                                 debit
   404
               3
                             1323.30
                                       2022-08-12
                                                    101
                                                               405
                                                                       1
                                                                                 debit
   403
                                       2022-09-03
                                                                                 debit
               2
                             1523.30
                                                     101
                                                               405
   402
                             1523.30
                                       2022-08-31
                                                    101
                                                               405
                                                                                 debit
  401
                                       2022-08-29
                                                    101
                                                               405
                                                                                 debit
               1
                             1323.30
Result 72 🗙
```