Investment management

Introduction:

Investment management refers to the handling of financial assets and other investments—not only buying and selling them.

Management includes devising a short- or long-term strategy for acquiring and disposing of portfolio holdings.

It can also include banking, budgeting, and tax services and duties, as well.

The term most often refers to managing the holdings within an investment portfolio, and the trading of them to achieve a specific investment objective.

Investment management is also known as money management, portfolio management, or wealth management.

Clients of investment managers can be either individual or institutional investors.

Investment management includes devising strategies and executing trades within a financial portfolio.

Objective:

The company will be able to easily track the details of customer investment.

It will give a proper relation regarding which customer are investing in which investment portfolio.

It will give details regarding how many customer are being doing investment on regular basis.

It will helps tracking customer more interest in which investment field.

STRUCTURE OF TABLE

CUSTOMER:
This table contains the details of all the customer such as their name, location, mobile number customer id.

```
MariaDB [investment]> desc customer;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| cust_id     | int(11)     | NO   | PRI | NULL    |       |
| cust_name   | varchar(30) | YES  |     | NULL    |       |
| location    | varchar(20) | YES  |     | NULL    |       |
| mobile_num  | bigint(20)  | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
```

STOCK:
This table contains all the investment related to stock.

```
MariaDB [investment]> desc stock;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| company_code | bigint(20)  | YES  |     | NULL    |       |
| company_name | varchar(30) | YES  |     | NULL    |       |
| Invested_amt | bigint(20)  | YES  |     | NULL    |       |
| No_of_shares | bigint(20)  | YES  |     | NULL    |       |
| cust_ref_id  | int(11)     | YES  | MUL | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
```

MUTUAL FUND:
This table contains all the investment related to mutual fund.

```
MariaDB [investment]> desc mutual_fund;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| foilo_number | bigint(20)   | YES  |     | NULL    |       |
| fund_name    | varchar(300) | YES  |     | NULL    |       |
| invested_amt | bigint(20)   | YES  |     | NULL    |       |
| cust_ref_id  | int(11)      | YES  | MUL | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
```

This table contains all the investment related to fd.

```
MariaDB [investment]> desc fd;
+-----------------+---------------+------+-----+---------+-------+
| Field           | Type          | Null | Key | Default | Extra |
+-----------------+---------------+------+-----+---------+-------+
| receipt_no      | bigint(20)    | YES  |     | NULL    |       |
| Bank_name       | varchar(100)  | YES  |     | NULL    |       |
| invested_amount | bigint(20)    | YES  |     | NULL    |       |
| maturity_value  | bigint(20)    | YES  |     | NULL    |       |
| cust_ref_id     | int(11)       | YES  | MUL | NULL    |       |
+-----------------+---------------+------+-----+---------+-------+
```

CONTENTS OF TABLE

Customer:

```
MariaDB [investment]> select * from customer;
+---------+-----------+----------+------------+
| cust_id | cust_name | location | mobile_num |
+---------+-----------+----------+------------+
|       1 | rahul     | dadar    | 1234567891 |
|       2 | rohit     | sion     | 1234567892 |
|       3 | kiran     | mulund   | 1234567893 |
|       4 | nishaant  | mulund   | 1234567894 |
|       5 | krishna   | thane    | 1234567895 |
|       6 | sandeep   | thane    | 1234567896 |
|       7 | durga     | diva     | 1234567897 |
|       8 | Akash     | kalyan   | 1234567898 |
|       9 | daksh     | bdl      | 1234567899 |
|      10 | darsh     | amb      | 1334567899 |
|      11 | reyansh   | amb      | 1344567899 |
|      12 | Aditi     | andheri  | 1354567899 |
|      13 | rohan     | pune     | 1354567899 |
|      14 | sahil     | kurla    | 1364567899 |
|      15 | devansh   | vikhroli | 1234567123 |
|      16 | navya     | vikhroli | 1234567145 |
|      17 | tushar    | cst      | 1234567147 |
|      18 | diya      | mulund   | 1234567148 |
|      19 | jaya      | kalyan   | 1234567143 |
|      20 | kirti     | thane    | 1231231231 |
+---------+-----------+----------+------------+
```

STOCK

```
MariaDB [investment]> select * from stock;
+--------------+--------------+--------------+--------------+-------------+
| company_code | company_name | Invested_amt | No_of_shares | cust_ref_id |
+--------------+--------------+--------------+--------------+-------------+
|          123 | bajfiance    |        45000 |           50 |           5 |
|          111 | adanient     |        60000 |          200 |           7 |
|          456 | yes_bank     |        80000 |         5000 |           3 |
|          789 | tcs          |       100000 |         1000 |           4 |
|          121 | infosys      |       200000 |          500 |           1 |
|          921 | icici        |       400000 |          700 |           2 |
|          991 | itc          |       200000 |          450 |           5 |
|          232 | axis         |        50000 |          100 |           6 |
|          241 | wipro        |        25000 |          400 |           8 |
|          293 | nestle       |        45000 |          250 |           9 |
|          294 | jsw          |        40000 |          950 |          10 |
|          295 | ntpc         |       150000 |          400 |           8 |
|          296 | tata motors  |       150000 |         1000 |          11 |
|          297 | adani        |       400000 |         4000 |          12 |
|          298 | vedanta      |        80000 |         3000 |          15 |
|          299 | dabur        |       200000 |          300 |          14 |
|          300 | adani        |       250000 |         2000 |          18 |
|          301 | tata_motors  |        42000 |         1500 |          19 |
|          302 | dfl          |        60000 |          500 |          15 |
|          303 | cipla        |        80000 |          900 |          17 |
+--------------+--------------+--------------+--------------+-------------+
```

MUTUAL FUND:

```
MariaDB [investment]> select * from mutual_fund;
+--------------+----------------+--------------+-------------+
| foilo_number | fund_name      | invested_amt | cust_ref_id |
+--------------+----------------+--------------+-------------+
|        12345 | uti_fexi_cap   |        50000 |           5 |
|        12356 | sbi_contra     |      1000000 |           1 |
|        12357 | dsp_focus      |       150000 |           2 |
|        12358 | elss           |       200000 |           2 |
|        12359 | hdfc           |       300000 |           3 |
|        12360 | idfc           |        80000 |           4 |
|        12361 | jm_flexi       |       200000 |           5 |
|        12362 | dsp_equity     |       250000 |           6 |
|        12363 | canara_bluechip|       200000 |           7 |
|        12364 | nippon_fund    |      1000000 |           7 |
|        12365 | white_oak      |       500000 |           9 |
|        12366 | icici_fund     |       100000 |          10 |
|        12367 | quant_fund     |        80000 |          11 |
|        12368 | invesco        |        40000 |          12 |
|        12369 | sundaram_flexi |        90000 |          15 |
|       123670 | sundaram_midcap|        50000 |          16 |
|       123671 | tata_small_cap |       150000 |          17 |
|       123672 | tata_midcap    |       250000 |          14 |
|       123673 | tata_largecap  |       300000 |          15 |
|       123674 | hdfc_midcap    |       300000 |          18 |
+--------------+----------------+--------------+-------------+
```
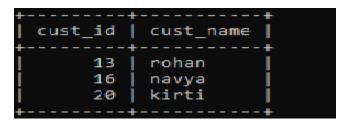
FD

```
MariaDB [investment]> select * from fd;
+------------+-----------+-----------------+----------------+-------------+
| receipt_no | Bank_name | invested_amount | maturity_value | cust_ref_id |
+------------+-----------+-----------------+----------------+-------------+
|        111 | icici     |          100000 |         150000 |           1 |
|        112 | hdfc      |          150000 |         200000 |           2 |
|        113 | boi       |          200000 |         250000 |           3 |
|        114 | bob       |          400000 |         450000 |           5 |
|        115 | bob       |          500000 |         550000 |           6 |
|        116 | axis      |          500000 |         550000 |           9 |
|        117 | bandhan   |          250000 |         300000 |          10 |
|        118 | uco       |          250000 |         300000 |           5 |
|        119 | bob       |          150000 |         200000 |          11 |
|        120 | boi       |          500000 |         550000 |          13 |
|        121 | icici     |          500000 |         550000 |          11 |
|        122 | icici     |          500000 |         550000 |          17 |
|        123 | bob       |          500000 |         550000 |          19 |
|        124 | axis      |          200000 |         250000 |          15 |
|        125 | bob       |          200000 |         250000 |          14 |
|        126 | bob       |          300000 |         350000 |          16 |
|        126 | Axis      |          400000 |         450000 |          17 |
|        127 | bob       |          400000 |         450000 |          11 |
|        128 | boi       |          200000 |         250000 |          13 |
|        129 | Axis      |          200000 |         250000 |          14 |
+------------+-----------+-----------------+----------------+-------------+
```

- Find the customer name who has not invested in stock.

>>>MariaDB [investment]> select cust_id,cust_name from customer where cust_id not in(select cust_ref_id from stock);

```
+-----------+-------------+
| cust_id   | cust_name   |
+-----------+-------------+
|       13  | rohan       |
|       16  | navya       |
|       20  | kirti       |
+-----------+-------------+
```

- show customer details who have invested in stock and mutual fund.

>>> MariaDB [investment]> select * from customer where cust_id in(select cust_ref_id from mutual_fund) in (select cust_ref_id from stock);

```
+-----------+-------------+-----------+-------------+
| cust_id   | cust_name   | location  | mobile_num  |
+-----------+-------------+-----------+-------------+
|        1  | rahul       | dadar     | 1234567891  |
|        2  | rohit       | sion      | 1234567892  |
|        3  | kiran       | mulund    | 1234567893  |
|        4  | nishaant    | mulund    | 1234567894  |
|        5  | krishna     | thane     | 1234567895  |
|        6  | sandeep     | thane     | 1234567896  |
|        7  | durga       | diva      | 1234567897  |
|        9  | daksh       | bdl       | 1234567899  |
|       10  | darsh       | amb       | 1334567899  |
|       11  | reyansh     | amb       | 1344567899  |
|       12  | Aditi       | andheri   | 1354567899  |
|       14  | sahil       | kurla     | 1364567899  |
|       15  | devansh     | vikhroli  | 1234567123  |
|       16  | navya       | vikhroli  | 1234567145  |
|       17  | tushar      | cst       | 1234567147  |
|       18  | diya        | mulund    | 1234567148  |
+-----------+-------------+-----------+-------------+
```

- show the customer who has invested in bob bank for fd from thane location

>>> MariaDB [investment]> select * from customer where location='thane' and cust_id in (select cust_ref_id from fd where bank_name='bob');

```
+---------+-----------+----------+-------------+
| cust_id | cust_name | location | mobile_num  |
+---------+-----------+----------+-------------+
|       5 | krishna   | thane    | 1234567895  |
|       6 | sandeep   | thane    | 1234567896  |
+---------+-----------+----------+-------------+
```

JOINS

- Two table join

>>> MariaDB [investment]> select cust_id,cust_name,location,mobile_num,invested_amount as fd_investment,bank_name,maturity_value from customer inner join fd on customer.cust_id=fd.cust_ref_id order by cust_id;

```
+---------+-----------+----------+------------+---------------+-----------+----------------+
| cust_id | cust_name | location | mobile_num | fd_investment | bank_name | maturity_value |
+---------+-----------+----------+------------+---------------+-----------+----------------+
|       1 | rahul     | dadar    | 1234567891 |        100000 | icici     |         150000 |
|       2 | rohit     | sion     | 1234567892 |        150000 | hdfc      |         200000 |
|       3 | kiran     | mulund   | 1234567893 |        200000 | boi       |         250000 |
|       5 | krishna   | thane    | 1234567895 |        400000 | bob       |         450000 |
|       5 | krishna   | thane    | 1234567895 |        250000 | uco       |         300000 |
|       6 | sandeep   | thane    | 1234567896 |        500000 | bob       |         550000 |
|       9 | daksh     | bdl      | 1234567899 |        500000 | axis      |         550000 |
|      10 | darsh     | amb      | 1334567899 |        250000 | bandhan   |         300000 |
|      11 | reyansh   | amb      | 1344567899 |        400000 | bob       |         450000 |
|      11 | reyansh   | amb      | 1344567899 |        500000 | icici     |         550000 |
|      11 | reyansh   | amb      | 1344567899 |        150000 | bob       |         200000 |
|      13 | rohan     | pune     | 1354567899 |        500000 | boi       |         550000 |
|      13 | rohan     | pune     | 1354567899 |        200000 | boi       |         250000 |
|      14 | sahil     | kurla    | 1364567899 |        200000 | Axis      |         250000 |
|      14 | sahil     | kurla    | 1364567899 |        200000 | bob       |         250000 |
|      15 | devansh   | vikhroli | 1234567123 |        200000 | axis      |         250000 |
|      16 | navya     | vikhroli | 1234567145 |        300000 | bob       |         350000 |
|      17 | tushar    | cst      | 1234567147 |        400000 | Axis      |         450000 |
|      17 | tushar    | cst      | 1234567147 |        500000 | icici     |         550000 |
|      19 | jaya      | kalyan   | 1234567143 |        500000 | bob       |         550000 |
+---------+-----------+----------+------------+---------------+-----------+----------------+
```

>>> MariaDB [investment]> select cust_id,cust_name,location,mobile_num,invested_Amt as stock_investment,company_name,company_code from customer Right join stock on customer.cust_id=stock.cust_ref_id order by cust_id;

cust_id	cust_name	location	mobile_num	stock_investment	company_name	company_code
1	rahul	dadar	1234567891	200000	infosys	121
2	rohit	sion	1234567892	400000	icici	921
3	kiran	mulund	1234567893	80000	yes_bank	456
4	nishaant	mulund	1234567894	100000	tcs	789
5	krishna	thane	1234567895	45000	bajfiance	123
5	krishna	thane	1234567895	200000	itc	991
6	sandeep	thane	1234567896	50000	axis	232
7	durga	diva	1234567897	60000	adanient	111
8	Akash	kalyan	1234567898	25000	wipro	241
8	Akash	kalyan	1234567898	150000	ntpc	295
9	daksh	bdl	1234567899	45000	nestle	293
10	darsh	amb	1334567899	40000	jsw	294
11	reyansh	amb	1344567899	150000	tata motors	296
12	Aditi	andheri	1354567899	400000	adani	297
14	sahil	kurla	1364567899	200000	dabur	299
15	devansh	vikhroli	1234567123	80000	vedanta	298
15	devansh	vikhroli	1234567123	60000	dfl	302
17	tushar	cst	1234567147	80000	cipla	303
18	diya	mulund	1234567148	250000	adani	300
19	jaya	kalyan	1234567143	42000	tata_motors	301

- Three table join

>>> MariaDB [investment]> select cust_id,cust_name,location,mobile_num,invested_amount as fd_investment,company_name,invested_amt as stock_investment from customer inner join fd on customer.cust_id=fd.cust_ref_id inner join stock on fd.cust_ref_id=stock.cust_ref_id order by cust_id;

```
+---------+-----------+----------+------------+---------------+--------------+------------------+
| cust_id | cust_name | location | mobile_num | fd_investment | company_name | stock_investment |
+---------+-----------+----------+------------+---------------+--------------+------------------+
|       1 | rahul     | dadar    | 1234567891 |        100000 | infosys      |           200000 |
|       2 | rohit     | sion     | 1234567892 |        150000 | icici        |           400000 |
|       3 | kiran     | mulund   | 1234567893 |        200000 | yes_bank     |            80000 |
|       5 | krishna   | thane    | 1234567895 |        400000 | bajfiance    |            45000 |
|       5 | krishna   | thane    | 1234567895 |        400000 | itc          |           200000 |
|       5 | krishna   | thane    | 1234567895 |        250000 | bajfiance    |            45000 |
|       5 | krishna   | thane    | 1234567895 |        250000 | itc          |           200000 |
|       6 | sandeep   | thane    | 1234567896 |        500000 | axis         |            50000 |
|       9 | daksh     | bdl      | 1234567899 |        500000 | nestle       |            45000 |
|      10 | darsh     | amb      | 1334567899 |        250000 | jsw          |            40000 |
|      11 | reyansh   | amb      | 1344567899 |        400000 | tata motors  |           150000 |
|      11 | reyansh   | amb      | 1344567899 |        500000 | tata motors  |           150000 |
|      11 | reyansh   | amb      | 1344567899 |        150000 | tata motors  |           150000 |
|      14 | sahil     | kurla    | 1364567899 |        200000 | dabur        |           200000 |
|      14 | sahil     | kurla    | 1364567899 |        200000 | dabur        |           200000 |
|      15 | devansh   | vikhroli | 1234567123 |        200000 | vedanta      |            80000 |
|      15 | devansh   | vikhroli | 1234567123 |        200000 | dfl          |            60000 |
|      17 | tushar    | cst      | 1234567147 |        400000 | cipla        |            80000 |
|      17 | tushar    | cst      | 1234567147 |        500000 | cipla        |            80000 |
|      19 | jaya      | kalyan   | 1234567143 |        500000 | tata_motors  |            42000 |
+---------+-----------+----------+------------+---------------+--------------+------------------+
```

- find those customer and count who has invested in mutual fund in more than one funds .

>>> MariaDB [investment]> select cust_ref_id,count(cust_ref_id) from mutual_fund group by cust_ref_id having count(cust_ref_id)>1 order by cust_ref_id;

```
+-------------+--------------------+
| cust_ref_id | count(cust_ref_id) |
+-------------+--------------------+
|           2 |                  2 |
|           5 |                  2 |
|           7 |                  2 |
|          15 |                  2 |
+-------------+--------------------+
```

- show total investment of customer who has invested in mutual fund more than one.

>>> MariaDB [investment]> select cust_ref_id,sum(invested_amt) total_investment from mutual_fund group by cust_ref_id having count(cust_ref_id)>1 order by cust_ref_id;

```
+-------------+------------------+
| cust_ref_id | total_investment |
+-------------+------------------+
|           2 |           350000 |
|           5 |           250000 |
|           7 |          1200000 |
|          15 |           390000 |
+-------------+------------------+
```

- multiple table views

>>> MariaDB [investment]> create view view_fd_customer as select cust_id,cust_name,location,mobile_num,sum(invested_amount) fd_investment,sum(maturity_value) fd_maturity_amt from customer,fd where cust_id=cust_ref_id group by cust_id order by cust_id;

```
MariaDB [investment]> select * from view_fd_customer;
+---------+-----------+----------+------------+---------------+-----------------+
| cust_id | cust_name | location | mobile_num | fd_investment | fd_maturity_amt |
+---------+-----------+----------+------------+---------------+-----------------+
|       1 | rahul     | dadar    | 1234567891 |        100000 |          150000 |
|       2 | rohit     | sion     | 1234567892 |        150000 |          200000 |
|       3 | kiran     | mulund   | 1234567893 |        200000 |          250000 |
|       5 | krishna   | thane    | 1234567895 |        650000 |          750000 |
|       6 | sandeep   | thane    | 1234567896 |        500000 |          550000 |
|       9 | daksh     | bdl      | 1234567899 |        500000 |          550000 |
|      10 | darsh     | amb      | 1334567899 |        250000 |          300000 |
|      11 | reyansh   | amb      | 1344567899 |       1050000 |         1200000 |
|      13 | rohan     | pune     | 1354567899 |        700000 |          800000 |
|      14 | sahil     | kurla    | 1364567899 |        400000 |          500000 |
|      15 | devansh   | vikhroli | 1234567123 |        200000 |          250000 |
|      16 | navya     | vikhroli | 1234567145 |        300000 |          350000 |
|      17 | tushar    | cst      | 1234567147 |        900000 |         1000000 |
|      19 | jaya      | kalyan   | 1234567143 |        500000 |          550000 |
+---------+-----------+----------+------------+---------------+-----------------+
```

>>> MariaDB [investment]> create view view_stock as select cust_id,cust_name,location,sum(invested_amt) stock_investment,company_code from customer,stock where cust_id=cust_ref_id group by cust_id order by cust_id;

```
MariaDB [investment]> select * from view_stock;
+---------+-----------+-----------+------------------+--------------+
| cust_id | cust_name | location  | stock_investment | company_code |
+---------+-----------+-----------+------------------+--------------+
|       1 | rahul     | dadar     |           200000 |          121 |
|       2 | rohit     | sion      |           400000 |          921 |
|       3 | kiran     | mulund    |            80000 |          456 |
|       4 | nishaant  | mulund    |           100000 |          789 |
|       5 | krishna   | thane     |           245000 |          123 |
|       6 | sandeep   | thane     |            50000 |          232 |
|       7 | durga     | diva      |            60000 |          111 |
|       8 | Akash     | kalyan    |           175000 |          241 |
|       9 | daksh     | bdl       |            45000 |          293 |
|      10 | darsh     | amb       |            40000 |          294 |
|      11 | reyansh   | amb       |           150000 |          296 |
|      12 | Aditi     | andheri   |           400000 |          297 |
|      14 | sahil     | kurla     |           200000 |          299 |
|      15 | devansh   | vikhroli  |           140000 |          298 |
|      17 | tushar    | cst       |            80000 |          303 |
|      18 | diya      | mulund    |           250000 |          300 |
|      19 | jaya      | kalyan    |            42000 |          301 |
+---------+-----------+-----------+------------------+--------------+
```