**A)**

**hive> desc customer;**

OK

cust\_id int

cust\_fname string

cust\_lname string

cust\_age int

cust\_profession string

Time taken: 0.058 seconds, Fetched: 5 row(s)

**hive> desc transaction;**

OK

t\_id int

t\_date string

cust\_id int

amount double

category string

sub\_cat string

state string

city string

spendby string

Time taken: 0.043 seconds, Fetched: 9 row(s)

**hive> desc total\_sum;**

OK

total double

Time taken: 0.047 seconds, Fetched: 1 row(s)

**Q1>Count the number of records for each profession in customer:**

**SQL>select profession, count(\*) from customer group by profession;**

Politician$227

Computer support specialist$222

Photographer$222

Loan officer$221

Librarian$218

Firefighter$217

Computer software engineer$216

Pharmacist$213

Human resources assistant$212

Social worker$212

**Q2>Top 10 spenders**

**SQL>select t.cust\_id,c.cust\_fname,c.cust\_lname,c.cust\_age,c.cust\_profession, ROUND(sum(t.amount)) as SUM1 from transaction t JOIN customer c ON (t.cust\_id=c.cust\_id) group by t.cust\_id,c.cust\_fname,c.cust\_lname,c.cust\_age,c.cust\_profession order by SUM1 DESC limit 10;**

4009485,Stuart,House,58,Teacher,1973.0

4006425,Joe,Burns,30,Economist,1732.0

4000221,Glenda,Boswell,28,Civil engineer,1671.0

4003228,Elsie,Newton,54,Accountant,1641.0

4006606,Jackie,Lewis,66,Recreation and fitness worker,1629.0

4006467,Evelyn,Monroe,37,Financial analyst,1606.0

4004927,Joan,Lowry,30,Librarian,1577.0

4008321,Paul,Carey,64,Human resources assistant,1561.0

4000815,Julie,Galloway,53,Actor,1558.0

4001051,Arlene,Higgins,62,Police officer,1489.0

**Q3>Total customers who dont have any profession.**

**SQL>select count(\*) from customer where cust\_profession = "";**

OK

83

**Q4>Total sales % for each sales\_type**

**SQL>select a.spendby, sum(a.amount) as TOTAL1, ROUND(((sum(a.amount)/b.total)\*100),2) from transaction a , total\_sum b group by a.spendby,b.total;**

cash 187685.6099999996 3.67

credit 4923134.930000015 96.33

**B)**

**hive> desc Stock;**

OK

stock\_id string

stock\_name string

stock\_date string

v1 double

v2 double

v3 double

v4 double

stock\_volumn int

v5 double

Time taken: 0.064 seconds, Fetched: 9 row(s)

**Q1> Total stock Varience top10;**

**SQL>select stock\_name, max(((v2-v3)\*100)/v3) as MAX\_VALUE from Stock group by stock\_name order by MAX\_VALUE DESC limit 10;**

ALY 325.0

AIG 309.6

AFF 291.33858267716533

AI 233.33333333333337

AGM 187.95013850415512

AGD 155.96707818930037

AXL 150.81081081081078

AVF 149.00000000000003

ALD 140.36363636363637

ARL 138.08777429467082

**2>Total stock volumn for each stock top 10;**

**SQL>select stock\_name, sum(stock\_volumn) as TOTAL from Stock group by stock\_name order by TOTAL DESC limit 10;**

AMD 47252808500

AA 42061448400

AXP 40263020300

AET 30218027200

ABT 25664130200

AMR 22505621700

AVP 20750196700

ABX 16691172100

APC 15555731900

ADM 15354593500

**C>**

**hive> desc retail;**

OK

t\_date string

cust\_id string

age string

area string

p\_sub string

p\_id string

qty int

cost int

sales int

Time taken: 0.051 seconds, Fetched: 9 row(s)

**hive> desc margin;**

OK

p\_id string

profit int

margin double

qty int

Time taken: 0.06 seconds, Fetched: 4 row(s)

**hive> desc profit; //Net Profit**

OK

total bigint

Time taken: 0.059 seconds, Fetched: 1 row(s)

**hive> desc gross\_profit;**

OK

total bigint

Time taken: 0.053 seconds, Fetched: 1 row(s)

**hive> desc gross\_loss;**

OK

total bigint

Time taken: 0.04 seconds, Fetched: 1 row(s)

**Q1>Total Net Profit.**

**SQL>select sum(sales-cost) from retail;**

OK

16163257

**Q2>Profit % for those products having margin more than 10%.**

**SQL>select ROUND(sum(profit)/b.total\*100,2) from margin a , gross\_profit b where margin>10 group by b.total;**

OK

91.26

**Q3>Total qty for those products margin more than 10%.**

**SQL>select sum(qty) from margin where margin>10;**

OK

887096

**Q4>Find Gross Profit**

**SQL> select sum(profit) from margin where profit > 0;**

16634804

**Q5>Find Gross Loss**

**SQL>select sum(profit) from margin where profit < 0;**

-471547

**Q6> Find (Gross Loss-Gross Profit)/Gross Loss \* 100;**

**SQL>select ROUND((b.total/a.total)\*100,2) from gross\_profit a, gross\_loss b;**

OK

-2.83