ADB phase1 Project

Team members:-

Name	SEC	BN
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Submitted to:-

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Existing system description

OS

Linux, Ubuntu 20.04

CPU

Processors are 0,1,2,3,4,5,6,7,8,9,10,11 are all with characteristics like,
vendor_id : GenuineIntel
cpu family : 6
model : 158
model name : Intel(R) Core(TM) i7-9750H CPU @ 2.60GHz
stepping : 10
microcode : 0xde
cpu MHz : 800.181
cache size : 12288 KB
cpu cores : 6
fpu : yes
address sizes : 39 bits physical, 48 bits virtual

RAM

Size= 15.5 GiB
Cache= 2.4 GiB

Hard Disk

Disk /dev/loop0: 55.39 MiB, 58073088 bytes, 113424 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/loop1: 64.79 MiB, 67915776 bytes, 132648 sectors
Units: sectors of 1 * 512 = 512 bytes

Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/loop2: 162.89 MiB, 170778624 bytes, 333552 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/loop3: 111.58 MiB, 116981760 bytes, 228480 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/loop4: 31.6 MiB, 32571392 bytes, 63616 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/sda: 931.53 GiB, 1000204886016 bytes, 1953525168 sectors
Disk model: TOSHIBA MQ04ABF1
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes
Disklabel type: gpt
Disk identifier: AEC88E09-670F-4D56-9AA4-4534C5B0B8DE

Device	Start	End	Sectors	Size	Type
/dev/sda1	2048	34815	32768	16M	Microsoft reserved
/dev/sda2	34816	879212035	879177220	419.2G	Microsoft basic data
/dev/sda3	879212544	880263167	1050624	513M	EFI System
/dev/sda4	880263168	1953523711	1073260544	511.8G	Linux filesystem

Disk /dev/nvme0n1: 238.49 GiB, 256060514304 bytes, 500118192 sectors
Disk model: KBG40ZNS256G NVMe KIOXIA 256GB
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disklabel type: gpt
Disk identifier: 3115375C-3C48-4146-8F29-ED7D39C5381F

Device	Start	End	Sectors	Size	Type
/dev/nvme0n1p1	2048	1085439	1083392	529M	Windows recovery environment
/dev/nvme0n1p2	1085440	1290239	204800	100M	EFI System
/dev/nvme0n1p3	1290240	1323007	32768	16M	Microsoft reserved
/dev/nvme0n1p4	1323008	500117503	498794496	237.9G	Microsoft basic data

Table of contents

1 Account

Creation: Dec 27, 2020 at 04:04 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Account_No	int		No					
Acc_Type	binary(1)		No					
Balance	decimal(10, 0)		No					
Bno	int		No			-> branch.Branch_id ON UPDATE RESTRICT ON DELETE RESTRICT		

2 Availed_by

Creation: Dec 27, 2020 at 04:04 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Loan_no	int		No			-> Loan.Loan_id ON UPDATE RESTRICT ON DELETE RESTRICT		
Cust_no	int		No			-> customer.Customer_ID ON UPDATE RESTRICT ON DELETE RESTRICT		

3 bank

Creation: Dec 27, 2020 at 04:04 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Bank_code	int		No					
Address	varchar(100)		No					
Name	varchar(100)		No					

4 branch

Creation: Dec 27, 2020 at 04:04 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Branch_id	int		No					
Name	varchar(100)		No					
Address	varchar(100)		No					
Bank_code	int		No			-> bank.Bank_code ON UPDATE RESTRICT ON DELETE RESTRICT		

5 customer

Creation: Dec 27, 2020 at 04:04 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Customer_ID	int		No					
Name	varchar(100)		No					
Phone Number	int		No					
Address	varchar(100)		No					

6 Hold_by

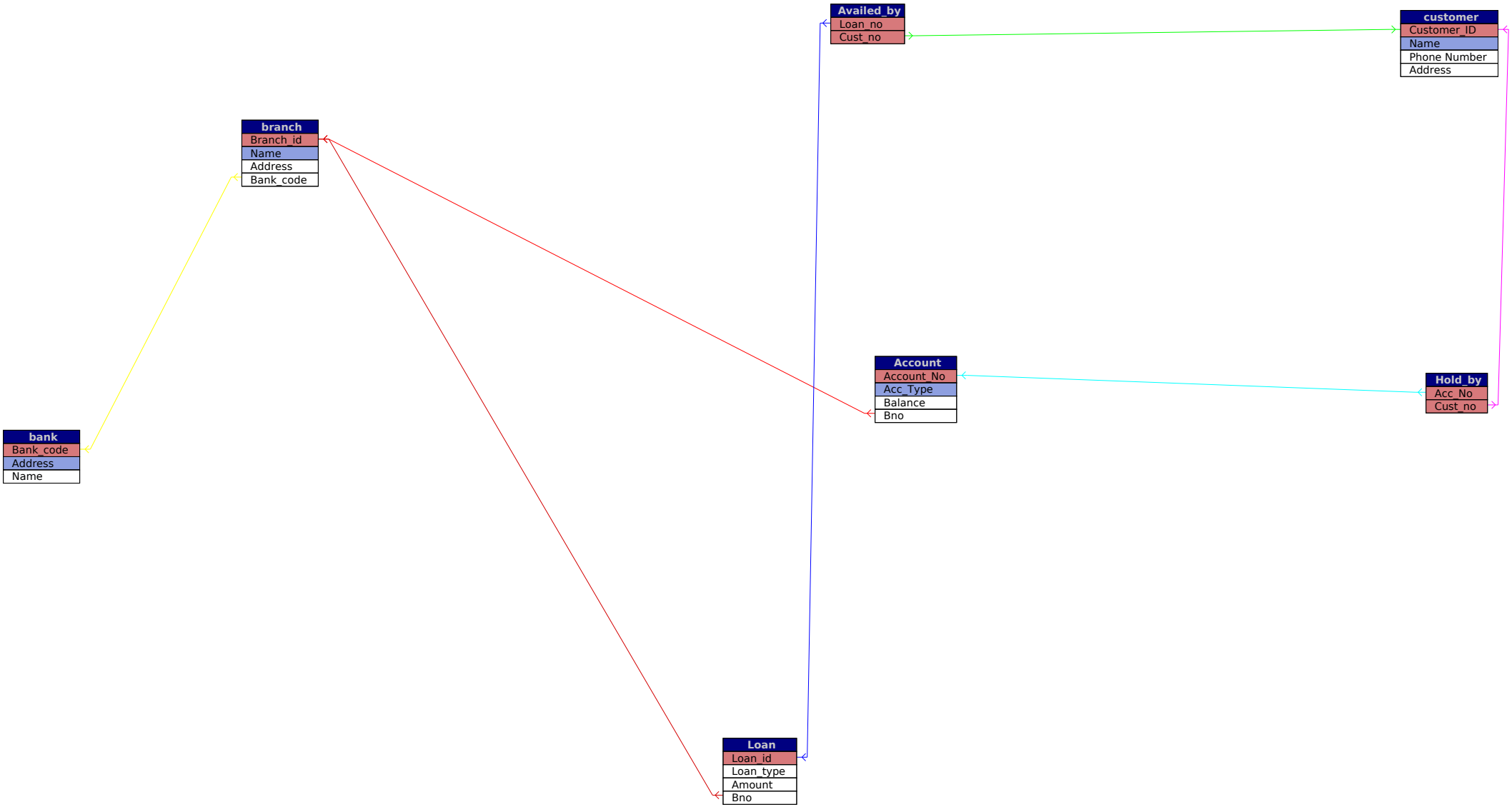
Creation: Dec 27, 2020 at 04:04 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Acc_No	int		No			-> Account.Account_No ON UPDATE RESTRICT ON DELETE RESTRICT		
Cust_no	int		No			-> customer.Customer_ID ON UPDATE RESTRICT ON DELETE RESTRICT		

7 Loan

Creation: Dec 27, 2020 at 09:51 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Loan_id	int		No					
Loan_type	int		No					
Amount	decimal(10, 0)		No					
Bno	int		No			-> branch.Branch_id ON UPDATE RESTRICT ON DELETE RESTRICT		


Availed_by
Loan_no
Cust_no
customer
Customer_ID
Name
Phone Number
Address
branch
Branch_id
Name
Address
Bank_code
Account
Account_No
Acc_Type
Balance
Bno
Hold_by
Acc_No
Cust_no
bank
Bank_code
Address
Name
Loan
Loan_id
Loan_type
Amount
Bno

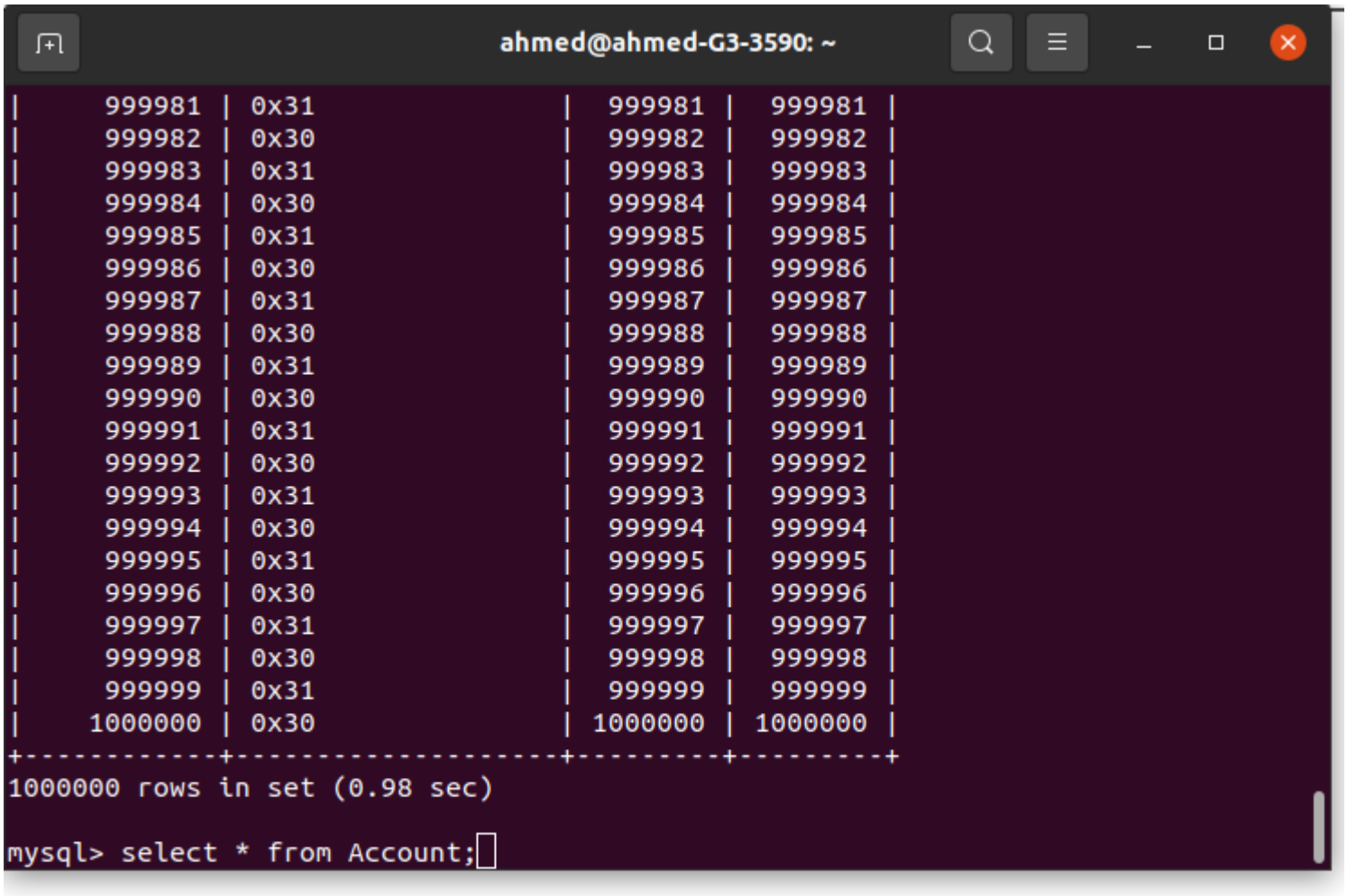
Show query box

Your SQL query has been executed successfully.

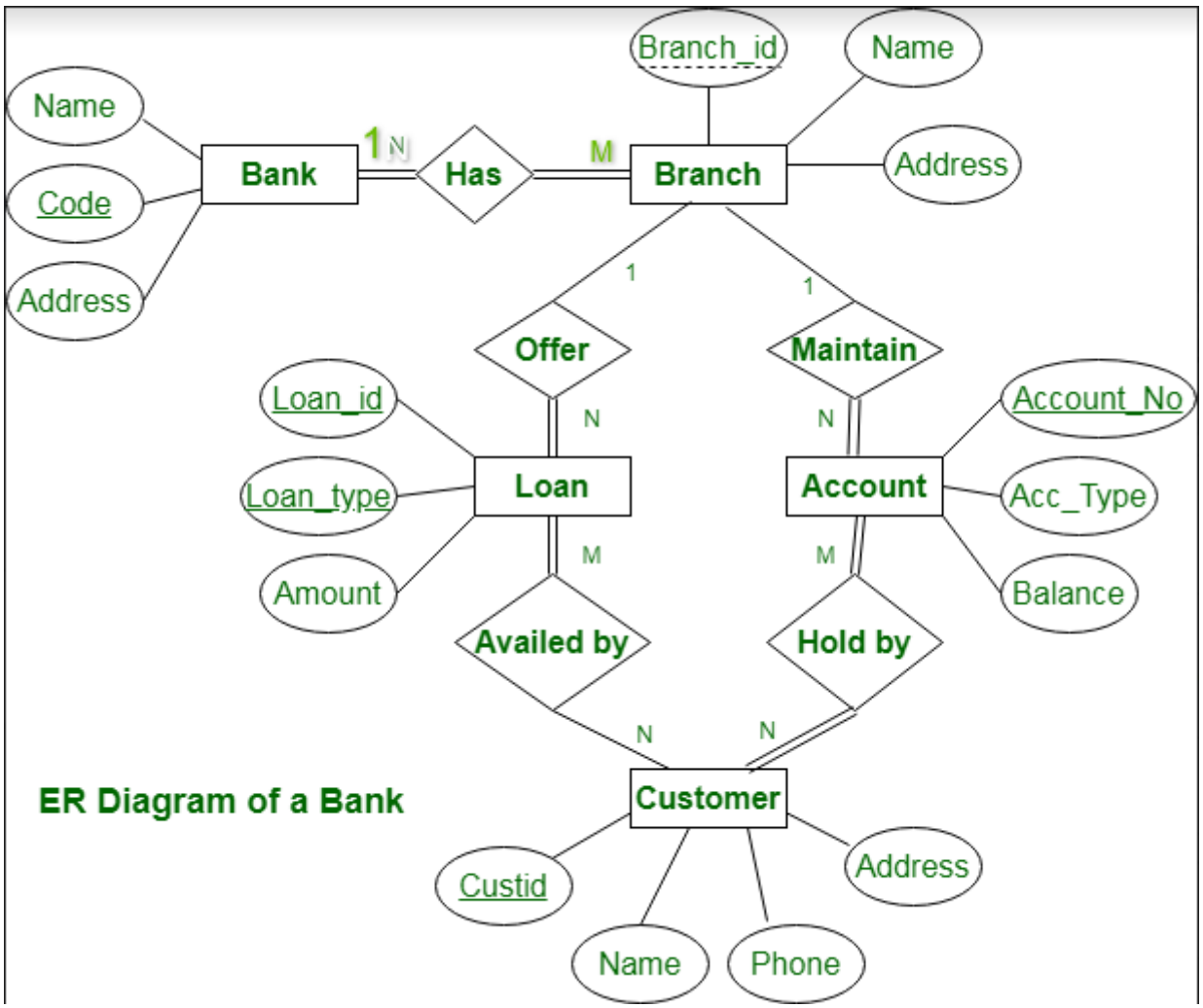
```
show table status from Testing_project
```

Name	Engine	Version	Row_format	Rows	Avg_row_length	Data_length	Max_data_length	Index_length	Data_free	Auto_increment	Create_time	Updat
Account	InnoDB	10	Dynamic	998446	35	35192832	0	24150016	0	NULL	2020-12-27 16:04:14	NULL
Availed_by	InnoDB	10	Dynamic	984987	29	28901376	0	28344320	0	NULL	2020-12-27 16:04:15	NULL
Hold_by	InnoDB	10	Dynamic	998739	28	28901376	0	28344320	0	NULL	2020-12-27 16:04:16	NULL
Loan	InnoDB	10	Dynamic	997899	39	39387136	0	38322176	0	NULL	2020-12-27 21:51:28	NULL
bank	InnoDB	10	Dynamic	996387	59	59326464	0	0	0	NULL	2020-12-27 16:04:13	NULL
branch	InnoDB	10	Dynamic	997859	65	65617920	0	14172160	0	NULL	2020-12-27 16:04:13	NULL
customer	InnoDB	10	Dynamic	998223	62	62472192	0	0	0	NULL	2020-12-27 16:04:14	NULL

Avg_row_length is the row size in MB



Please note that, total number of rows at each table is 1000000 rows, as shown in the python code attached with the project. However, in phpmyadmin, it shows only the numbers in the tables above but when I run a query like here in the terminal on the mysql itself, it shows that they are 1000000 rows.



This ER diagram is from GeeksForGeeks, there're many things that need to be changed in the ER diagram and it will be done in the next phase in the optimization process.