DROP TABLE IF EXISTS `customer`;

CREATE TABLE `customer` (`id` int(11) auto\_increment,

`type` varchar(45) NOT NULL,

`email` varchar(45) NOT NULL,

`password` varchar(45) NOT NULL, primary key(id));

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (1,'home','betty@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (2,'home','rachel@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (3,'home','cindy@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (4,'home','chilam@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (5,'home','denny@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (6,'business','lib@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (7,'business','sch@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (8,'business','one@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (9,'business','two@gmail.com','123');

INSERT INTO `customer`(`id`,`type`,`email`,`password`) VALUES (10,'business','three@gmail.com','123');

DROP TABLE IF EXISTS `home\_customer`;

CREATE TABLE `home\_customer` (`id` int(11),

`name` varchar(45) NOT NULL,

`addressid` varchar(11) NOT NULL,`gender` varchar(45) NOT NULL,`marriage\_status` varchar(45) NOT NULL,`age` varchar(45) NOT NULL,

`income` varchar(45) NOT NULL, primary key(id));

INSERT INTO `home\_customer`(`id`,`name`,`addressid`,`gender`,`marriage\_status`,`age`,`income`) VALUES (1,'betty','1','female','yes','45','60000');

INSERT INTO `home\_customer`(`id`,`name`,`addressid`,`gender`,`marriage\_status`,`age`,`income`) VALUES (2,'rachel','2','female','no','35','120000');

INSERT INTO `home\_customer`(`id`,`name`,`addressid`,`gender`,`marriage\_status`,`age`,`income`) VALUES (3,'cindy','1','female','no','28','50000');

INSERT INTO `home\_customer`(`id`,`name`,`addressid`,`gender`,`marriage\_status`,`age`,`income`) VALUES (4,'chilam','1','male','yes','41','250000');

INSERT INTO `home\_customer`(`id`,`name`,`addressid`,`gender`,`marriage\_status`,`age`,`income`) VALUES (5,'denny','2','male','no','25','60000');

DROP TABLE IF EXISTS `business\_customer`;

CREATE TABLE `business\_customer` (`id` int(11),

`name` varchar(45) NOT NULL,

`addressid` varchar(11) NOT NULL,`category` varchar(45) NOT NULL,`income` varchar(45) NOT NULL, primary key(id));

INSERT INTO `business\_customer`(`id`,`name`,`addressid`,`category`,`income`) VALUES (6,'first library','4','Nonprofit','300000');

INSERT INTO `business\_customer`(`id`,`name`,`addressid`,`category`,`income`) VALUES (7,'first school','2','Education','210000');

INSERT INTO `business\_customer`(`id`,`name`,`addressid`,`category`,`income`) VALUES (8,'fashion info','3','Books and magazines','3000000');

INSERT INTO `business\_customer`(`id`,`name`,`addressid`,`category`,`income`) VALUES (9,'mock company','3','Food retail and service','2500000');

INSERT INTO `business\_customer`(`id`,`name`,`addressid`,`category`,`income`) VALUES (10,'grand investor','4','Financial services and products','5000000');

DROP TABLE IF EXISTS `product`;

CREATE TABLE `product` (`id` int(11) auto\_increment,

`name` varchar(45) NOT NULL,

`author` varchar(45) NOT NULL,`price` float(11) NOT NULL,`introduction` varchar(45) NOT NULL,`category` varchar(45) NOT NULL,`image` varchar(45) NOT NULL,`cost` float(11) NOT NULL, primary key(id));

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (1,'Leonardo and the Last Supper','Ross King',22.93,'The Last Supper.','Art&Photography','images/5.jpg',11.95);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (2,'Brunelleschis Dome','Ross King',5.03,'Florences magnificent new cathedral','Art&Photography','images/6.jpg',3.8);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (3,'Scrappy Little Nobody','Anna Kendrick',16.06,'humorous autobiographical essays','Biographies&Memoirs','images/10.jpg',8.43);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (4,'Today I ll Be a Princess','Paula Croyle',5.03,'every girls princess fantasies.','Childrens Books','images/18.jpg',3.98);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (5,'DanTDM: Trayaurus and the Enchanted Crystal','DanTDM',11.35,'From the mind of one of the most popular','Childrens Books','images/17.jpg',5.65);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (6,'Paint by Sticker Kids','Workman Publishing',8.07,'Find the sticker, place the sticker. ','Childrens Books','images/19.jpg',6.16);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (7,'Create 10 Pictures One Sticker at a Time','Workman Publishing',8.95,'Move over, coloring books!','Childrens Books','images/20.jpg',5.67);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (8,'Take Heart, My Child: A Mothers Dream','Ainsley Earhardt and Kathryn Cristaldi',17.09,'On The Night You Were Born.','Childrens Books','images/21.jpg',12.11);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (9,'Countdown to Pearl Harbor','Steve Twomey',23.48,'the warnings, clues and missteps.','History','images/25.jpg',21.23);

INSERT INTO `product`(`id`,`name`,`author`,`price`,`introduction`,`category`,`image`,`cost`) VALUES (10,'Humans of New York : Stories','Brandon Stanton',20.48,'Now a #1 New York Times Bestseller!','History','images/27.jpg',16.64);

DROP TABLE IF EXISTS `transaction`;

CREATE TABLE `transaction` (`transaction\_id` int(11), `product\_id` int(11),`amount` int(11), `price` float(11), `customer\_id` int(11), `store\_id` int(11), `time` varchar(45), `sale` float(11), primary key(transaction\_id, product\_id));

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (1,1,1,22.93,1,1,'2017-02-15',22.93);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (1,3,1,16.06,2,1,'2017-02-15',16.06);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (2,4,1,5.03,4,2,'2017-02-18',5.03);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (3,2,2,5.03,6,3,'2017-02-19',10.06);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (4,9,2,23.48,6,3,'2017-02-22',46.96);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (5,8,2,17.09,6,3,'2017-02-22',34.18);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (6,5,2,11.35,7,3,'2017-02-24',22.7);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (6,6,2,8.07,7,3,'2017-02-24',16.14);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (6,7,1,8.95,7,3,'2017-02-24',8.95);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (7,3,1,16.06,8,3,'2017-02-28',16.06q);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (8,3,2,16.06,6,1,'2017-02-28',32.12);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (8,9,2,23.48,6,1,'2017-02-28',46.96);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (9,1,1,22.93,8,2,'2017-02-28',22.93);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (9,2,2,5.03,8,2,'2017-02-28',10.06);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (9,10,1,20.48,8,2,'2017-02-28',20.48);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (10,2,2,5.03,6,1,'2017-03-01',10.06);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (11,1,1,22.93,3,1,'2017-03-03',22.93);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (12,1,1,22.93,5,1,'2017-03-05',22.93);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (13,1,1,22.93,6,3,'2017-03-06',22.93);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (13,8,1,17.09,6,3,'2017-03-06',17.09);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (14,6,1,8.07,4,3,'2017-03-07',8.07);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (15,5,1,11.35,1,4,'2017-03-13',11.35);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (16,6,1,8.07,3,4,'2017-03-16',8.07);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (17,3,1,16.06,3,4,'2017-03-17',16.06);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (18,3,1,16.06,10,3,'2017-03-18',16.06);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (18,7,2,8.95,10,3,'2017-03-18',17.9);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (18,10,1,20.48,10,3,'2017-03-18',20.48);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (19,2,2,5.03,6,1,'2017-03-18',10.06);

INSERT INTO `transaction`(`transaction\_id`,`product\_id`,`amount`,`price`,`customer\_id`,`store\_id`,`time`,`sale`) VALUES (20,7,1,8.95,9,2,'2017-03-20',8.95);

DROP TABLE IF EXISTS `store`;

CREATE TABLE `store` (`id` int(11) auto\_increment,

`state` varchar(45) NOT NULL, primary key(id));

INSERT INTO `store`(`id`,`state`) VALUES (1,'NY');

INSERT INTO `store`(`id`,`state`) VALUES (2,'PA');

INSERT INTO `store`(`id`,`state`) VALUES (3,'PA');

INSERT INTO `store`(`id`,`state`) VALUES (4,'OH');

DROP TABLE IF EXISTS `address`;

CREATE TABLE `address` (`id` int(11) auto\_increment,

`street` varchar(45) NOT NULL, `city` varchar(45) NOT NULL, `state` varchar(45) NOT NULL, `zip` varchar(45) NOT NULL, primary key(id));

INSERT INTO `address`(`id`,`street`,`city`,`state`,`zip`) VALUES (1,'centre avenue','Pittsburgh','PA','15213');

INSERT INTO `address`(`id`,`street`,`city`,`state`,`zip`) VALUES (2,'penn avenue','Pittsburgh','PA','15213');

INSERT INTO `address`(`id`,`street`,`city`,`state`,`zip`) VALUES (3,'6th avenue','Pittsburgh','PA','152001');

INSERT INTO `address`(`id`,`street`,`city`,`state`,`zip`) VALUES (4,'fifth avenue','New York City','NY','10006');

##Create Data Warehouse

DROP TABLE IF EXISTS `fact`;

CREATE TABLE `fact` (`product\_id` varchar(45) NOT NULL,`amount` int(11) NOT NULL,`store\_id` varchar(45) NOT NULL,`customer\_id` varchar(45) NOT NULL,`time` varchar(45),`sale` float(11) NOT NULL);

Insert into fact select product\_id,amount, store\_id, customer\_id, time, sum(sale) from transaction group by product\_id,customer\_id,store\_id,time;

DROP TABLE IF EXISTS `product\_dim`;

CREATE TABLE `product\_dim` (`product\_id` int(11) NOT NULL,`name` varchar(45) NOT NULL,`price` float(11), `cost` float(11), `category` varchar(45) NOT NULL);

Insert into product\_dim select id,name, price, cost, category from product;

DROP TABLE IF EXISTS `store\_dim`;

CREATE TABLE `store\_dim` (`store\_id` varchar(45) NOT NULL,`region` varchar(45) NOT NULL);

Insert into store\_dim select id,state from store;

DROP TABLE IF EXISTS `customer\_dim`;

CREATE TABLE `customer\_dim` (`customer\_id` int(11) NOT NULL,`type` varchar(45) NOT NULL);

Insert into customer\_dim select id, type from customer;

1.select type, count(\*) from customer\_dim group by type;

2.

3.(select by date)

Select

5.select region, sum(amount) from fact, store\_dim where fact.store\_id = store\_dim.store\_id group by store\_dim.region