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=====EXCERSISE1=====

/*-- Q1 Write a program that computes the perimeter and the area of a rectangle. Define
your own values for the length and width. (Assuming that L and W are the length
and width of the rectangle, Perimeter = 2*(L+W) and Area = L*W. */

CREATE TABLE area
(
len float,
breadth float,
area float,
perimeter float);

delimiter //
create procedure area(x float,y float)
begin
declare area float ;
declare perimeter float ;
set area =x*y;
set perimeter=2*(x+y);
insert into area values(x,y,area,perimeter);
end ; //
delimiter ;

call area(5,7);

select * from area;

/*2. Write a program that declares an integer variable called num, assigns a value to it,
and computes and inserts into the tempp table the value of the variable itself, its
square, and its cube.*/

create table num
(
num float,
square float,
```

```
cubeno float  
);  
drop table num;
```

```
delimiter //  
create function square(x float )  
returns float  
deterministic  
begin  
return pow(x,2);  
end ; //  
delimiter ;
```

```
delimiter //  
create function cube1(x float )  
returns float  
deterministic  
begin  
return pow(x,3);  
end ; //  
delimiter ;
```

```
delimiter //  
create procedure num( x float)  
begin  
declare sq float;  
declare cub float;  
set sq=square(x);  
set cub=cube1(x);  
insert into num values (x,sq,cub);  
end ; // delimiter ;
```

```
call num(5);
```

```
select * from num;
```

/*q3 Convert a temperature in Fahrenheit (F) to its equivalent in Celsius (C) and vice versa. The required formulae are:- $C = (F - 32) * 5/9$ */

```
create table temp
```

```
(
```

```
cel float,
```

```
fehrenheit float);
```

```
delimiter //
```

```
create function temp( x float)
```

```
returns float
```

```
deterministic
```

```
begin
```

```
declare c float;
```

```
set c= (x-32)* (5/9);
```

```
return c;
```

```
end ;//
```

```
delimiter ;
```

```
delimiter //
```

```
create procedure temp(x float)
```

```
begin
```

```
declare s float;
```

```
set s=temp(x);
```

```
insert into temp values(s,x);
```

```
end ; //
```

```
delimiter ;
```

```
call temp(32);
```

```
select * from temp;
```

```
/* q4 Convert a number of inches into yards, feet, and inches. For example, 124 inches  
equals 3 yards, 1 foot, and 4 inches */
```

```
create table len
```

```
(
```

```
inch float,
```

```
yard float,
```

```
foot float
```

```
);
```

```
delimiter //
```

```
create function yard( x float)
```

```
returns float
```

```
deterministic
```

```
begin
```

```
return x/36;
```

```
end ; //
```

```
delimiter ;
```

```
delimiter //
```

```
create function foot( x float)
```

```
returns float
```

```
deterministic
```

```
begin
```

```
return x/12;
```

```
end ; //
```

```
delimiter ;
```

```
delimiter //
create procedure inch( x float)
begin
declare yard float;
declare foot float;
set yard=yard(x);
set foot=foot(x);
insert into len values (x,yard,foot);
end ; //
delimiter ;
```

```
call inch(124);
select * from len;
```

/* q5 Write a program that enables a user to input an integer. The program should then state whether the integer is evenly divisible by 5. */

```
create table intege(
no int,
result boolean
);
delimiter //
create function five(x int)
returns boolean
deterministic
begin
if mod(x,5)=0 then
return true;
else
```

```
return false;
```

```
end if ;
```

```
end ; //
```

```
delimiter ;
```

```
delimiter //
```

```
create procedure no (x int)
```

```
begin
```

```
declare s boolean;
```

```
set s=five(x);
```

```
insert into intege values (x,s);
```

```
end ; //
```

```
delimiter ;
```

```
call no(15);
```

```
call no(44);
```

```
select * from intege;
```

```
/* q6 . Your block should read in two real numbers and tell whether the product of the two  
numbers is equal to or greater than 100. */
```

```
create table real1
```

```
(
```

```
x float,
```

```
y float,
```

```
product float,
```

```
result varchar(50)
```

```
);
```

```
delimiter //
```

```
create function real1(x float,y float)
```

```
returns varchar(50)
```

deterministic

begin

declare pro float ;

set pro=x*y;

if pro > 100 then

return "greater than 100 ";

elseif pro =100 then

return "equal to 100";

else

return "not greater " ;

end if ;

end; //

delimiter ;

delimiter //

create procedure real1(x float,y float)

begin

declare s varchar(50);

declare q float ;

set q =x * y;

set s=real1(x,y);

insert into real1 values (x,y,q,s);

end ; //

delimiter ;

call real1(5,10);

call real1(14,10);

call real1(10,10);

select * from real1;

