1. 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.

* **// Table to Store values**

**create table temp**

**(**

**area float,**

**perimeter float**

**);**

* **// Procedure**

**create procedure rectangle\_area\_perimeter(x float, y float)**

**begin**

**declare area float;**

**declare perimeter float;**

**set area = x\*y;**

**set perimeter = 2\*(x+y);**

**insert into temp values(area, perimeter);**

**end; //**

**delimiter ;**

* **// Procedure call**

**call rectangle\_area\_perimeter(10,10);**

**select \* from temp;**

1. 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.

**delimiter //**

**create procedure square\_cube(x int)**

**begin**

**declare num int;**

**declare square\_num int;**

**declare cubes\_num int;**

**set square\_num = x\*x;**

**set cubes\_num = x\*x\*x;**

**insert into tempp values(num,square\_num,cubes\_num);**

**end; //**

**delimiter ;**

**create table tempp**

**(**

**num int,**

**square\_num int,**

**cubes\_num int**

**);**

**call square\_cube(10);**

**select \* from tempp;**

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

* **// Table to Store values**

**create table tempp**

**(**

**temp float,**

**unit char(15)**

**);**

* **// Procedure**

**delimiter //**

**create procedure temperature\_convertor(temp float,unit char(15))**

**begin**

**declare temp\_c float;**

**declare temp\_f float;**

**if unit = 'celcius' then**

**set temp\_f = 9/5\*temp+32;**

**insert into tempp values(temp\_f,'fahrenheit');**

**elseif unit = 'fahrenheit' then**

**set temp\_c = (temp-32)\*5/9;**

**insert into tempp values(temp\_c,'celcius');**

**else**

**insert into tempp values(temp\_c,'invalid');**

**end if;**

**end //**

**delimiter ;**

* **// Procedure call**

**call temperature\_convertor(100,'celcius');**

**call temperature\_convertor(100,'fahrenheit');**

**select \* from tempp;**

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

**delimiter //**

**create procedure length\_converter(num float)**

**begin**

**declare len\_yards float;**

**declare len\_feet float;**

**declare len\_inches float;**

**set len\_inches = num/25.4;**

**set len\_feet = len\_inches/12;**

**set len\_yards = len\_feet/3;**

**insert into tempp values(num,len\_inches,len\_feet,len\_yards);**

**end; //**

**delimiter ;**

**create table tempp**

**(**

**mm float,**

**inch float,**

**feet float,**

**yard float**

**);**

**call length\_converter(1024);**

**select \* from tempp;**

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

**// Table to Store values**

**create table tempp**

**(**

**number int,**

**status char(15)**

**);**

**- // Procedure**

**delimiter //**

**create procedure is\_divisible\_by5(x int)**

**begin**

**if(x % 5 = 0 ) then**

**insert into tempp values(x,'true');**

**else**

**insert into tempp values(x,'false');**

**end if;**

**end; //**

**delimiter ;**

**- // Procedure call**

**call is\_divisible\_by5(10);**

**call is\_divisible\_by5(12);**

**select \* from tempp;**

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

**delimiter //**

**create procedure check\_product(num1 int, num2 int)**

**begin**

**declare if\_valid bool;**

**if num1\*num2 >= 100 then**

**set if\_valid = true;**

**else**

**set if\_valid = false;**

**end if;**

**insert into tempp values(num1,num2,if\_valid);**

**end; //**

**delimiter ;**

**create table tempp**

**(**

**num1 int,**

**num2 int,**

**status bool**

**);**

**call check\_product(12,12);**

**select \* from tempp;**