Exercise 6

1. Write a stored procedure by the name of Comp_intr to calculate the amount of interest on a bank account that compounds interest yearly. The formula is:-

I = p (1+ r) y – p

where:-

I is the total interest earned.

p is the principal.

r is the rate of interest as a decimal less than 1, and

y is the number of years the money is earning interest.

Your stored procedure should accept the values of p, r and y as parameters and insert the Interest and Total amount into tempp table.

Ans:

```
DELIMITER //

CREATE PROCEDURE Comp_intr(IN p FLOAT, IN r FLOAT, IN y INT)
BEGIN
   DECLARE total FLOAT;
   DECLARE interest FLOAT;
   SET total = p * POW((1 + r), y);
   SET interest = total - p;
   INSERT INTO tempp (interest, total_amount) VALUES (interest, total);
END;//
DELIMITER ;
```

interest	total_amount
102.5	1102.5

2. Create a stored function by the name of Age_calc. Your stored function should accept the date of birth of a person as a parameter. The stored function should calculate the age of the person in years. The stored function should return the age

in years.
Ans:

```
DELIMITER //

CREATE FUNCTION Age_calc(dob DATE)

RETURNS INT

DETERMINISTIC

BEGIN

   DECLARE age INT;

   SET age = TIMESTAMPDIFF(YEAR, dob, CURDATE());

   RETURN age;

END;//

DELIMITER ;
```