1.

**Use the cos polynomial:** If angle *x* is in degrees then convert it to radians by multiplying it by π/180. Then substitute *x* into the formula:

http://mathonweb.com/help_ebook/html/functions/functions41b.gif

DELIMITER $$

CREATE PROCEDURE lerp

(IN @angleInput integer)

BEGIN

declare @floorAngle integer;

select @floorAngle = top 1 angle

from cosine

where angle < @angleInput;

declare @floorValue real;

select @floorValue = cosValue

from cosine

where angle = @floorAngle;

declare @ceilingAngle integer;

select @ceilingAngle = @floorAngle + 5;

declare @ceilingValue real;

select @ceilingValue = cosValue

from cosine

where angle = @ceilingAngle;

declare @valueOutput real;

select @valueOutput = @floorValue + (@ceilingValue - @floorValue) \* (@angleInput - @floorAngle) / (@ceilingAngle - @floorAngle);

END$$

DELIMITER;

2. Descriptive Statistics

select max(amount), count(\*) from Salaries

where Amount = (select max(amount) from Salaries) ;

WITH ALIAS-

select max(amount) as max\_salary, count(\*) as count\_salary from Salaries

where Amount = (select max(amount) from Salaries) ;