Females :

Y = b0 + b2\*X2

And for Males :

Y = (b0 + b1) + (b2 + b3)\*X2

Where

Coefficients are as follows:

b0 = 35.11669

b1 = 1.92568

b2 = 1.23550

b3 = 0.25841

So for Females the equation is:

Y(f) = 35.11669 + 1.23550 \* X2

And for males its

Y(m) = 37.04237 + 1.49391 \* X2

Plot of the salary lines is as follows:

The lines are not parallel in this case as there is a different slope term for both the lines. The lines do not cross each other as the males salary started at higher range and since the slope of male salary is greater, this means that the male’s salary increases slightly more rapidly as the number of years of experience increases.