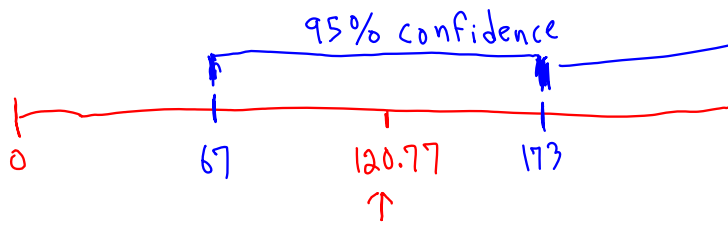


SUMMARY OUTPUT						
Regression Statistics						
Multiple R	0.927114671					
R Square	0.859541613					
Adjusted R Square	0.833205665					
Standard Error	256.0900055					
Observations	20					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	3	6421322.345	2140441	32.63758	4.73103E-07	
Residual	16	1049313.455	65582.09			
Total	19	7470635.8				
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-1056.880974	386.3318711	-2.73568	0.014659	-1875.86795	-237.8939988
Years of education	120.7737599	24.96104798	4.838489	0.000182	67.85870241	173.6888175
Years of work experience	46.87143152	19.35519807	2.421646	0.027698	5.840244841	87.9026182
Person's weight (lbs)	-0.022378653	1.327011125	-0.01686	0.986754	-2.835516551	2.790759244

Is each of the 3 circles coefficients "statistically significant?"

SUMMARY OUTPUT						
Regression Statistics						
Multiple R	0.927114671					
R Square	0.859541613					
Adjusted R Square	0.833205665					
Standard Error	256.0900055					
Observations	20					
ANOVA						
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Person's weight (lbs)	-0.022378653	1.327011125	-0.01686	0.986754	-2.835516551	2.790759244

Because '0' is not in the 95% confidence interval, we say that the coefficient for years of education is statistically significant at 95% level ($\alpha = .05$)



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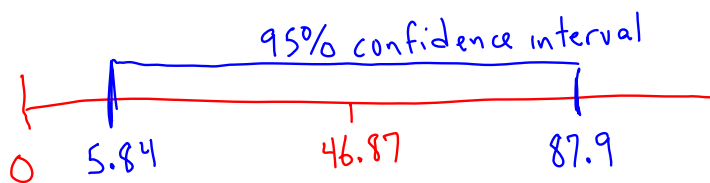
Because you are confident that the coefficient for "years of education" is NOT zero, you have support for your belief that the number of years of education affects a person's salary.

(Alternate method of determining statistical significance of a coefficient:

if the p-value is less than .05 then you have 95% confidence that the coefficient is not zero.

if the p-value is less than .01 then you have 99% confidence that the coefficient is not zero.

SUMMARY OUTPUT						
Regression Statistics						
Multiple R	0.927114671					
R Square	0.859541613					
Adjusted R Square	0.833205665					
Standard Error	256.0900055					
Observations	20					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	3	6421322.345	2140441	32.63758	4.73103E-07	
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Years of education	120.7737599	24.96104798	4.838489	0.000182	67.85870241	173.6888175
Years of work experience	46.87143152	19.35519807	2.421646	0.027698	5.840244841	87.9026182
Person's weight (lbs)	-0.022378653	1.327011125	-0.01686	0.986754	-2.835516551	2.790759244



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Because the 95% confidence interval for "years of work experience" does not contain zero, you say that the coefficient is "significant at the 95% level (alpha = .05)

(Alternately: because the p-value for the coefficient is less than .05, you can say that the coefficient is significant at the 95% level)

SUMMARY OUTPUT

Regression Statistics

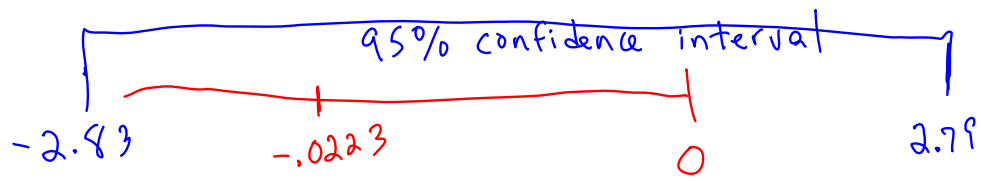
Multiple R	0.927114671
R Square	0.859541613
Adjusted R Square	0.833205665
Standard Error	256.0900055
Observations	20

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	6421322.345	2140441	32.63758	4.73103E-07
Residual	16	1049313.455	65582.09		
Total	19	7470635.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-1056.880974	386.3318711	-2.73568	0.014659	-1875.86795	-237.8939988
Years of education	120.7737599	24.96104798	4.838489	0.000182	67.85870241	173.6888175
Years of work experience	46.87143152	19.35519807	2.421646	0.027698	5.840244841	87.9026182
Person's weight (lbs)	-0.022378653	1.327011125	-0.01686	0.986754	-2.835516551	2.790759244

SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.927114671					
R Square	0.859541613					
Adjusted R Square	0.833205665					
Standard Error	256.0900055					
Observations	20					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	3	6421322.345	2140441	32.63758	4.73103E-07	
Residual	16	1049313.455	65582.09			
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	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
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Person's weight (lbs)	-0.022378653	1.327011125	-0.01686	0.986754	-2.835516551	2.790759244



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Because the 95% confidence interval for "person's weight" DOES contain "0", you are NOT 95% confident that the coefficient is statistically different from zero.

(alternately: because the p-value is larger than .05, you do not have a coefficient that is statistically significant with 95% confidence.

You regression does NOT support the belief that a person's weight influences her earnings.

When a coefficient is not statistically significant, you should consider:

1. Removing it from your data and re-running your regressions.
2. Abandoning your hypothesis and formulating a new one about the data with the non-confident coefficient.
3. Consult with a skilled statistician, who might be able to recommend more advanced statistical technical.