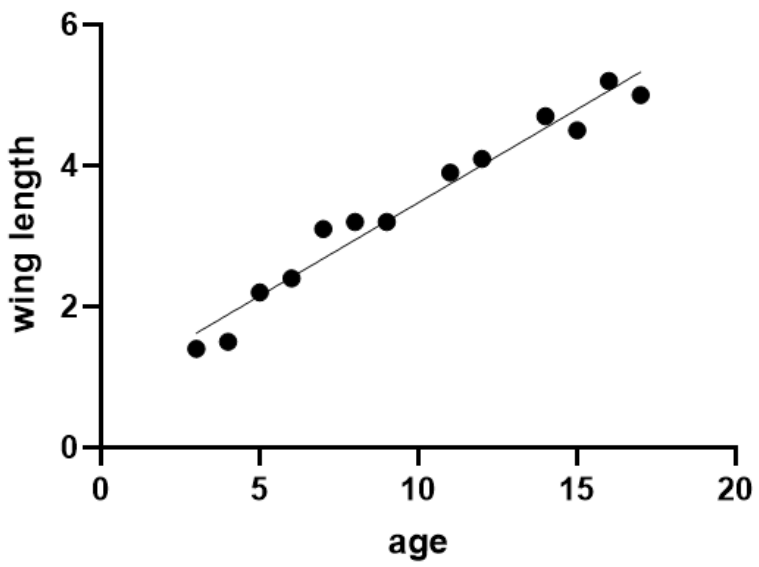
1. Plot the relationship between Age and Wing Length.



2. Calculate and plot the regression line.

Based on the output calculated above, the regression line is:

y= 0.925+0.257x

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.978352135
R Square	0.9571729
Adjusted R Square	0.95289019
Standard Error	0.255616664
Observations	12

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	14.60327	14.60327	223.4970138	3.6107E-08
Residual	10	0.653399	0.06534		
Total	11	15.25667			

	Coefficients	*andard Err*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.925075529	0.192515	4.805206	0.000717993	0.496124819	1.35402624	0.496124819	1.354026239
age	0.257250755	0.017208	14.94982	3.6107E-08	0.21890979	0.29559172	0.21890979	0.295591721

3. Can you reject H0:b=0?

I believe so, the correlation is close and the p value is less than 0.05.

4. Calculate and plot the confidence intervals on the slope of the regression.

Based on the output above, the confidence intervals are as follows: [0.2955,0.2189]

4. Calculate r2 (the coefficient of determination)

Based on the above output, the r^2 is 0.957

6. Calculate Pearson's *r*.

	Age	*Wing Length*
Age	1	
Wing Length	0.981520378	1

From the output from above the pearson's r is 0.981 which is a strong positive correlation.