

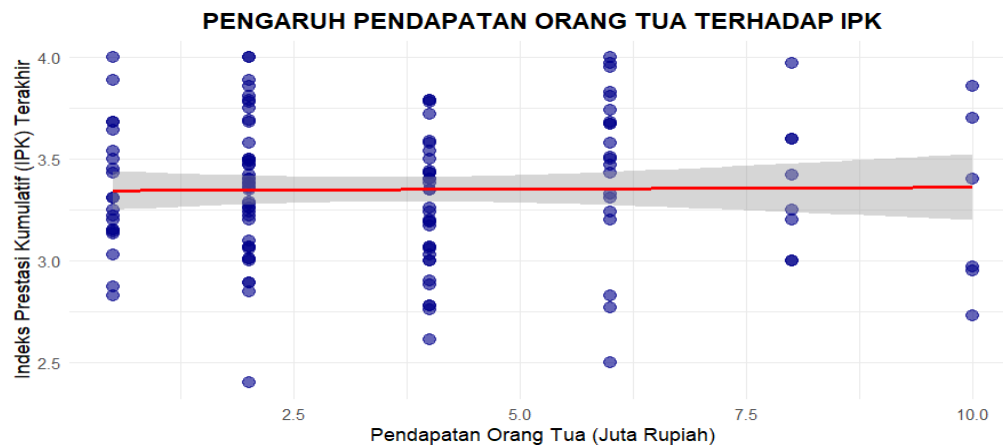
# Tugas Besar Analisis Data Statistika

## Kelompok 6 RB

### Output codeR\_6\_RB :

#### 1. Model 1 : Pengaruh Pendapatan Orang Tua terhadap IPK

- Hasil uji korelasi :  
Pearson's product-moment correlation  
  
data: df\_analisis\$Pendapatan\_Juta and df\_analisis\$IPK  
t = 0.14194, df = 131, p-value = 0.8873  
alternative hypothesis: true correlation is not equal to 0  
95 percent confidence interval:  
-0.1581601 0.1822426  
sample estimates:  
cor  
0.01240052
- Hasil analisis regresi  
Call:  
lm(formula = IPK ~ Pendapatan\_Juta, data = df\_analisis)  
  
Residuals:  
Min 1Q Median 3Q Max  
-0.94768 -0.24768 0.02232 0.23892 0.65487  
  
Coefficients:  
Estimate Std. Error t value Pr(>|t|)  
(Intercept) 3.344278 0.052894 63.226 <2e-16 \*\*\*  
Pendapatan\_Juta 0.001702 0.011988 0.142 0.887  
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Residual standard error: 0.3472 on 131 degrees of freedom  
Multiple R-squared: 0.0001538, Adjusted R-squared: -0.007479  
F-statistic: 0.02015 on 1 and 131 DF, p-value: 0.8873
- Visualisasi model



## 2. Model 2 : Pengaruh Jarak Tempat Tinggal terhadap IPK

- Hasil uji korelasi :  
Pearson's product-moment correlation

data: df\_model2\$Jarak and df\_model2\$IPK

t = -2.2174, df = 131, p-value = 0.02832

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval:

-0.34911818 -0.02063582

sample estimates:

cor

-0.1901945

- Hasil analisis regresi :

Call:

lm(formula = IPK ~ Jarak, data = df\_model2)

Residuals:

Min	1Q	Median	3Q	Max
-0.86287	-0.24910	0.01713	0.21495	0.73713

Coefficients:

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	3.45019	0.05382	64.101	<2e-16 ***
Jarak	-0.03406	0.01536	-2.217	0.0283 * ---

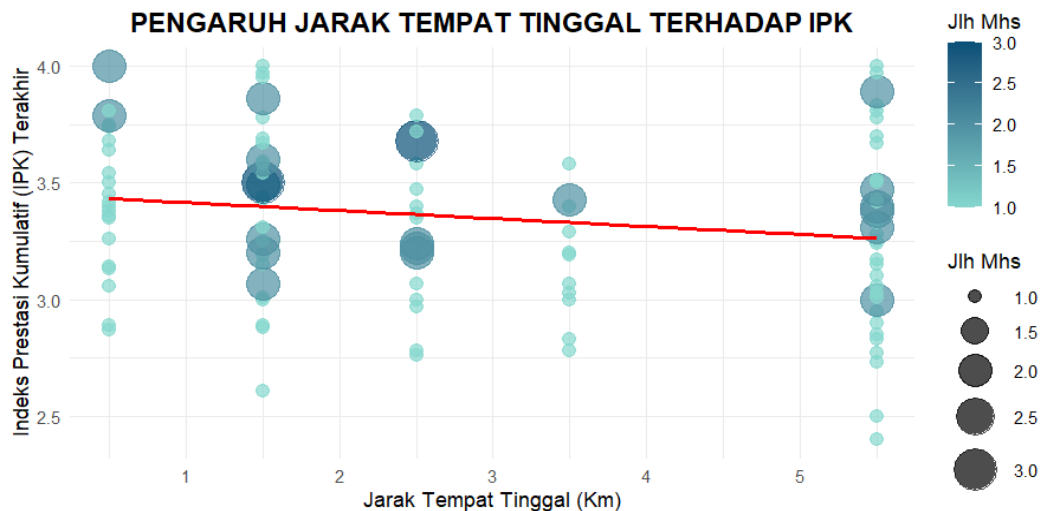
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.3409 on 131 degrees of freedom

Multiple R-squared: 0.03617, Adjusted R-squared: 0.02882

F-statistic: 4.917 on 1 and 131 DF, p-value: 0.02832

- Visualisasi model :



### 3. Model 3 : Pengaruh Akses Internet (Wifi Pribadi) terhadap IPK

- Hasil uji korelasi :

Pearson's product-moment correlation

data: df\_final\$Wifi\_Pribadi and df\_final\$IPK

t = 0.10013, df = 131, p-value = 0.9204

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval:

-0.1617199 0.1787084

sample estimates:

cor

0.00874773

- Hasil analisis regresi :

Call:

lm(formula = IPK ~ Wifi\_Pribadi, data = df\_final)

Residuals:

Min	1Q	Median	3Q	Max
-0.9547	-0.2547	0.0217	0.2353	0.6517

Coefficients:

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	3.348295	0.037013	90.46	<2e-16 ***
Wifi_Pribadi	0.006371	0.063632	0.10	0.92

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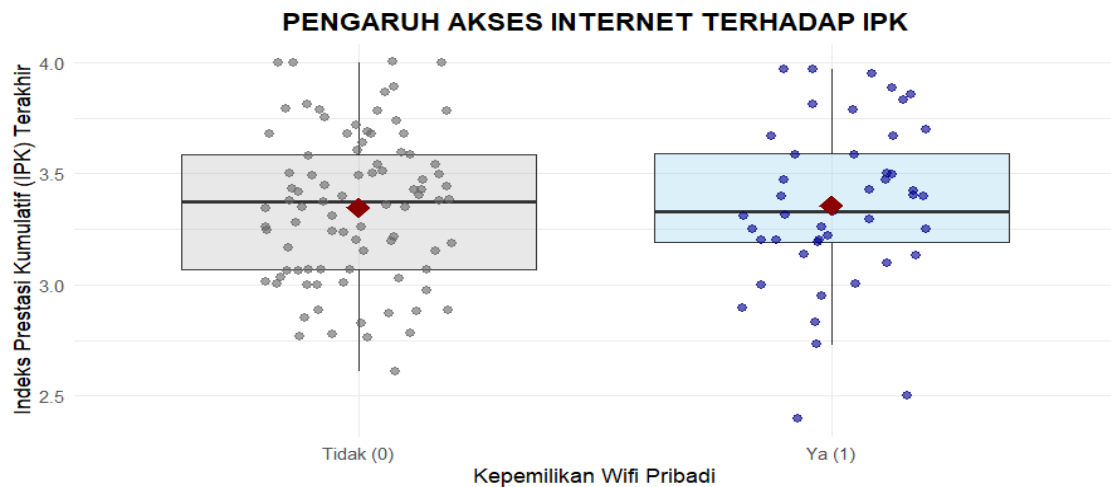
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.3472 on 131 degrees of freedom

Multiple R-squared: 7.652e-05, Adjusted R-squared: -0.007556

F-statistic: 0.01003 on 1 and 131 DF, p-value: 0.9204

- Visualisasi model :



#### 4. Model 4 : Analisis Regresi Berganda

- Hasil analisis regresi :

Call:

```
lm(formula = IPK ~ Pendapatan_Juta + Jarak + Wifi_Pribadi, data = df_final)
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Residuals:

Min	1Q	Median	3Q	Max
-0.86531	-0.22863	0.03623	0.23137	0.74016

Coefficients:

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	3.429433	0.064629	53.063	<2e-16 ***
Pendapatan_Juta	0.005302	0.012584	0.421	0.6742
Jarak	-0.036620	0.015894	-2.304	0.0228 *
Wifi_Pribadi	0.026679	0.066939	0.399	0.6909

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.3429 on 129 degrees of freedom

Multiple R-squared: 0.03969, Adjusted R-squared: 0.01736

F-statistic: 1.777 on 3 and 129 DF, p-value: 0.1547

- Visualisasi model :

HEATMAP KORELASI ANTAR VARIABEL/FAKTOR

