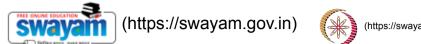
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NPTEL (https://swayam.gov.in/explorer?ncCode=NPTEL) » Data Science for Engineers (course)

Announcements (announcements) About the Course (https://swayam.gov.in/nd1\_noc20\_cs28/preview)

Ask a Question (forum) Progress (student/home) Mentor (student/mentor)

## Unit 8 - Week 6

Course outline	Assignment 6					
How does an NPTEL online course work?	The due date for submitting this assignment has passed. Due on 2020-03-11, 23:59 IST. As per our records you have not submitted this assignment.					
Week 0	1) The graph for the straight-line y=mx+b (m - slope, b - intercept) will have a upward slope when <b>1</b> the value of					
Week 1	○ m=0 ○ m>0					
Week 2	○ m<0					
Week 3	<ul><li>m≥0</li><li>No, the answer is incorrect.</li><li>Score: 0</li></ul>					
Week 4	Accepted Answers:  m>0					
Week 5	2) In the simple linear regression equation $y = 25.9 + 42x$ , where the value 25.9 refers to <b>1 point</b>					
Week 6	intercept					
Module: Predictive Modelling (unit? unit=43&lesson=44)	slope error prediction					
Linear Regression (unit? unit=43&lesson=45)	No, the answer is incorrect. Score: 0 Accepted Answers: intercept					
Model Assessment (unit? unit=43&lesson=46)	Based on the information given below answer the questions <b>3 and 4</b> The total sales amount (y) and price for each model of toaster(x) was recorded.					

Diagnostics to Improve Linear Model Fit (unit?		Sales amount(US dollars)	Price of the product (US dollars)			
Model Fit (unit? unit=43&lesson=47)		7000	62			
Simple Linear		4000	48			
Regression		6000	48			
Model Building		3000	40			
(unit? unit=43&lesson=48)						
		7000	60			
Simple Linear Regression		4500	50			
Model		5000	55			
Assessment	0) 0: !! (.	n	72 40 2701 00 11 151-1-1-1			
(unit? unit=43&lesson=49)	for a 56-dollar to		73.48x - 3781.98 , the estimated sales a	mount <b>1 poin</b>		
	ioi a 30-dollai to	743(6) 13				
Simple Linear	5933					
Regression Model	7895					
Assessment (	2500					
Continued )	4580					
(unit? unit=43&lesson=50)	No the answ	er is incorrect.				
	Score: 0	or to intoorroot.				
Muliple Linear	Accepted Ans	swers:				
Regression (unit?	5933					
unit=43&lesson=51)			73.48x - 3781.98 , the residual error whe	en the 1 poin		
Dataset (unit?	price of the prod	luct is 62 dollars is given by				
unit=43&lesson=52)	22.25					
○ FAQ (unit?	26.22					
unit=43&lesson=53)	25.36					
O Quiz : Practice	39.56					
Assignment 6						
(assessment?	No, the answer is incorrect. Score: 0					
name=95)	Accepted Ans	swers:				
O Quiz:	26.22					
Assignment 6 (assessment?	(assessment? 5) The coefficient of determination formula is:-					
name=119)	O(SST/S	SE) - 1				
• Week 6	1 – (SSE	·				
Feedback (unit?	O (SSR / S	·				
unit=43&lesson=123)	1 – (SSE	•				
Solution -	,	•				
Assignment 6 (unit?	No, the answ Score: 0	er is incorrect.				
unit=43&lesson=128)	Accepted Ans	swers:				
	1 – (SSE / SS	ST)				
Week 7	6) Which of the	e following method is <b>NOT</b> appr	opriate to check the association between two	o <b>1 poin</b>		
Week 8	continuous varia	*		•		
VVCCR O		L L. C.				
Text Transcripts		's correlation				
	Chi-squa					
Download Videos	Regress	ion				
	T-test					

T-test

No, the answer is incorrect. Score: 0		
Accepted Answers: Chi-square test		
7) If the value of SSE is equal to zero, then		1 point
correlation is equal to 0		
orrelation is less than 0		
ocefficient of determination(R2) must be	e equal to 1	
ocefficient of determination(R2) is equal	I to 0	
No, the answer is incorrect. Score: 0		
Accepted Answers: coefficient of determination(R <sup>2</sup> ) must be equ	ual to 1	
8) Which of the following is/ are <b>TRUE</b> with re	espect to Pearson's correlation( $r_{xy}$ )?	1 point
$r_{xy}$ takes a value between 0 to +1		
A measure for the degree of linear depe	endence between two numerical variables	
Cannot be applied to ordinal variables		
r <sub>xy</sub> = 0 means there is no correlation bet	tween x and y	
No, the answer is incorrect. Score: 0		
TGocaWk) in R studio.	n x and y	
	1	,
Variable	Description	1
mpg	Miles per gallon of the engine	1
weight	Weight of the car (lbs)	
9) Correlation between mpg and weight is (ro 0.71 -0.88 0.69 0.92 No, the answer is incorrect. Score: 0 Accepted Answers:	ound off to two decimal places)	1 point
-0.88		

10)The linear model for the given data is	1 point
y= 0.0407+7.032x y=-0.00629+40x y=0.020+0.45784x y=40.56198-0.00629x	
No, the answer is incorrect. Score: 0 Accepted Answers: y=40.56198-0.00629x	
11) The second quartile residual value for the linear model built on the Auto.csv data is	1 point
-1.91568 -7.2145 -0.08124 1.73406	
No, the answer is incorrect. Score: 0 Accepted Answers: -0.08124	
12From the regression model, the proportion of the variability explained in dependent variable by the independent variable is	1 point
77% 12% 88% 42%  No, the answer is incorrect. Score: 0 Accepted Answers: 77%	