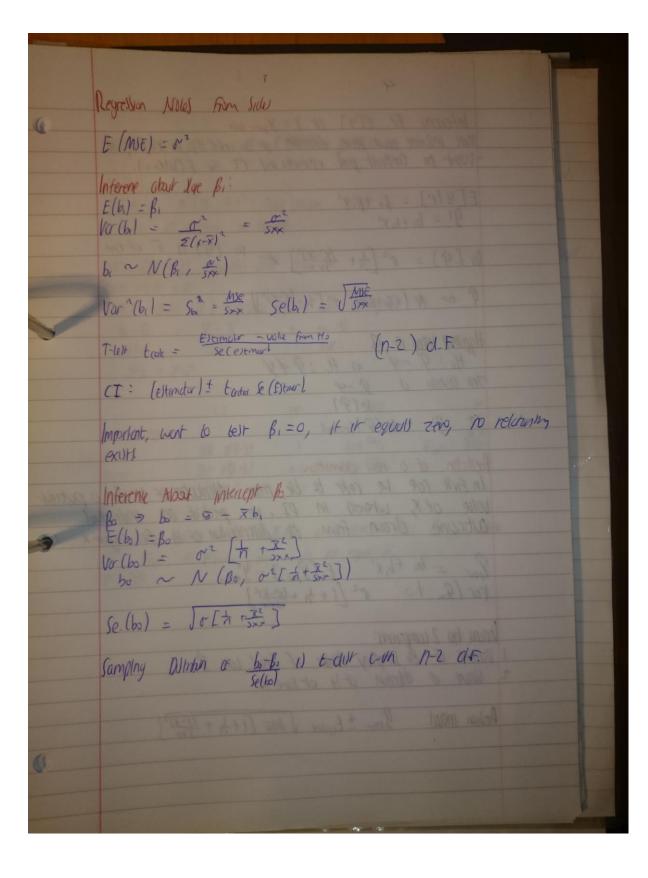
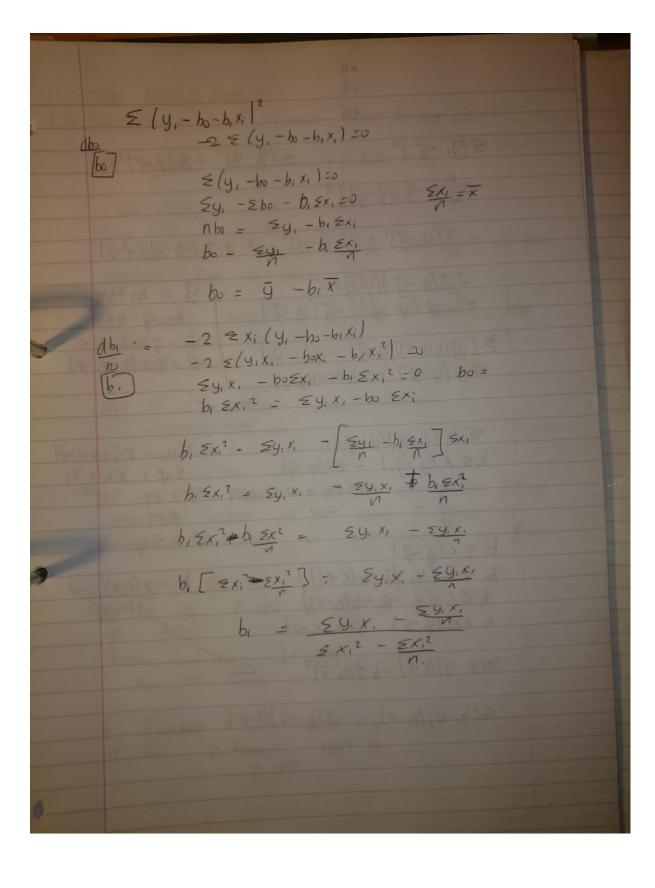


Assumptions: 1 x: U the 1th volve of the presider vonoble, which is a known consider to all a 2 The districtions 4: for En) are independent 3 At any guen xi, yiloreil U romally distributed u. The observation 4: (or eil have constant standard devicen. s. The means of 4: con be joined by a Straight line guen as ELYi] = Bo thiki where so and so ar unknown parameters, such that: B, is the stope of the regression line and indicate the change in be mea advantor of 9 per one untrack inx Bo is the interrept of the regions model. If it is sensible to think of a volve of x=0 for a particular application, then Bo gives the mean of the distribution of y at x=0. So it is not always possible to his a physical explorem of this permeter. lear sques: Aft wit b book E(y, Bo-Bix)2 b1= 2(x-x)(y-9) = Exy, - Ex.E €(x,->)2 bo = 9 - bo 7 Dxx = E(x1-x)2 = Exi2 by = 8(4:-9) = 841 - (84) Sky = 8kx-x 1(9,-9) = 8kiy, - 8ks 41 Estimber or 4: ~ N(Bo +Bit, or) SSE = E(4,-9,)2 = E(4,-B) for)2 = Ee,2 AKA RSE



	2.
Regress	n Nuc State
	of fix, + Ex or E(X1Xi) = gotheti
ANOL	A = (u - u - u - u - u - u - u - u - u - u
SSTO	= 5(9:-912 Tild unlow Eyi2
	to all respons on equal
"	had been been been been been been been bee
SSE	E(4;-9.)2 variety and filled to
SITU	= NE +NR
SSR	= 2(G9) varily assume who the region in
У,	-9 - 9-9 + y,-9
5:	TO SSE SSR
100	5y = 59?
	SS OF MS F
(. a.	
Parcel	of wown SSR \$9-99 1 MUN SIR/1 France = \$116. SSE \$19-91
Keyes	SSE E19-91+ N-2 MSE SS/2
Total	dy-9 12 n-1
Fol	con be used to let the B=0 is the Bitu follow Fi, n-2 disk
15	Frak = F(1-0x, 1, n-1 do not reget Hs
FS	(E)



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091
E(4,-5)2 = E(4,-9)2 + E(4-9)2
 E[(9,-9,)(9,-9)]?
 - E(y,-g)2+ E(g,-g)2 + 2 E(y,-9,1(9-g)
= [(gth (1,-9)) + = h (x,->)|y,-g) - 29 4, -6)
 2 b, (x-x)(y,-g).
                    Ey. = 59+6(x,-7)
 - £ 79, + EX 9, E4=5; E9 = E9
                           र्ध = ह्यां
bi Ex, (4, -9,1
hi = x, (y, -[y + b, (x, -x)])
b = x, (y, -g - b, (x, -x))
                            hi = E(x, x)(y,-9)
                                   E(K,-x)2
 b, Exily, -g) -b= x, (x, ->)
 E(y, -g)(x,-x) - h E(x;-x)2
 Ely,-9/(x,-x) - Ely,-9/(x,-x) =a
```