Corbin Feenstra

Exam #6

	1) Year	HPI	34	Forecast	Error) Eil	E ²
	1	143.51	Avy	-10166037			and the second
	2	149,14	-		~		n on the second second second by Shows -
lite of the second	2	152,34			_		the same of the same of the state of the state of the same of the state of the stat
and the fact that the set of the second s	4	158.59	and the second	8,33	10.26	10 21	105 77
	5	164.02	where are a first and as smaller as a process and as any	3,36		10.26	105,27
	· · · · · · · · · · · · · · · · · · ·	169.47	and the second	8.32	10,66	10.66	113,64
a the second second second second	67	Evena		A REAL PROPERTY AND A REAL	11.15	11.15	124.32
	8	165,67	and the second	4.02	1.65	1.65	2,72
	1	162.67	the second s	,39	-3,72	3,72	13.84
N	9	158.29		5.94	-7.65	7.65	58.52
	10	160.06	the second s	21	-2.15	2.15	4.62
	11 156.15		a the last second a first here as fight to furnish a summary second second	, 34	-4.19	4.19	17.56
	12	152.93	158,	,17	-5,24	5.24	27.46 467.9453
and the second	2)	1	1 1	٤)	1	56,67	
	2) Weight	ting Sche	me = last previous	month u	reighteo	by =	2
			previous	i by 2,	month	before t	hat by 1
V	8		1				
Year	Moving An	weighted	Error	JEI		Er2	and the second
	an a			salinging.			
2			persona di seconda di s	sizesettente.			and the second
3	110	(1) D	- 10	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	an a	~	an a
4	149.80 154.93 160.26		8.79	8,79		77,26	and an entry of the same generative the same
5			9.09	9.09		82.63	a new second
6			9.21	9.21	en e en en en en en en en en en fregueren.	84.82	
5678	165.84		17 .17			. 0289	
	166.66		-3.99 3.9		and the first of the second	15.92	
9	164.80		-6.51 6.51			42.38	
10	160,98		- 92	.92	ant man a statistica and a data. Mat	, 8464	1
1./.	159.9	a a state to which and in the of a set of a build of a method of the set of a set of	- 3.76	3,76		14.14	and a long to the line of the states in the states of
12	157.8	1	- 4.88	4,88		23.81	
1	ana an	and the second second second second second	- 1. Continues	47.30	1 3	41.893	8

3) 55xy = 12406.5 - (78)(1892.96) - 105.5) $55_{xx} = 650 - (78)^2 - 143$ $b_1 = \frac{55xy}{55xx} = \frac{105.5}{143} = .738$ $b_0 = \frac{1892,46}{12} = .738\left(\frac{78}{12}\right) = 157.705 - 4.797 = 152.91$ y=152.91+.738x Linear Reguession Forecast Year Error E:2 Erl 153.65 -10.14 10.14 102.82 2 154.39 5,25 27,56 - 5,25 3 155.12 2.78 -2,78 7.73 4 155.86 2,73 7.45 2,73 156.60 7.42 55,06 5 7.42 12,13 7.2 67 157.34 12.13 147,14 158.08 7,2 51,84 8 458.81 3.86 3,86 14.9 9 159.55 1,26 1.59 -1.26 10 -.23 160.29 ,23 . 05 23.81 - 4.88 4,86 1 161.03 78.15 12 161,77 -6.84 8,84 518.0968 66.72

4) 3-year moving Averages $MAD = \frac{2le_il}{\#of F}$ $= \frac{56.67}{9} = (6.297)$ $M5E = Ze^2$ #of Forecasts $= \frac{467,9453}{9} = (51,994)$ 3 year - Weighted Moving Averages $MAD = \frac{47.32}{9} = (5.253)$ M5E = 341,8438 = (37,983)Linear Begression Analysis $MAD = \frac{66,72}{12} = (5,56)$ $M5E = \frac{518.0968}{12} = (43.175)$

5) My forecast for gear 13 is 155, 19 (HPI). I arrived at this answer by using the weighted moving average forecast. I used this forecast because it had the lowest MAD and MSE values, suggesting that it is the most accurate torecasting method out of the methods used a given the current data set. 3(152.93) + 2(156.15) + (160.06) = 155.19