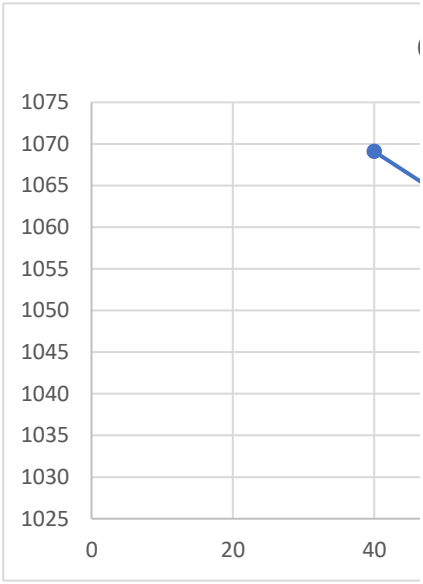
PROBLEM-1

t(X)	R(Y)
40	1069.1
50	1063.6
60	1058.2
70	1052.7
90	1041.8
100	1036.3
110	1030.8

∑Y	7352.5
∑X	520
∑X*X	42800
∑X*Y	543905



Y=AX+B

NORMAL EQUATIONS ARE:

∑Y=A∑X+BN 7352.5=520X+7B

∑X*Y=A∑X*X+B∑X 543905=42800A+520B

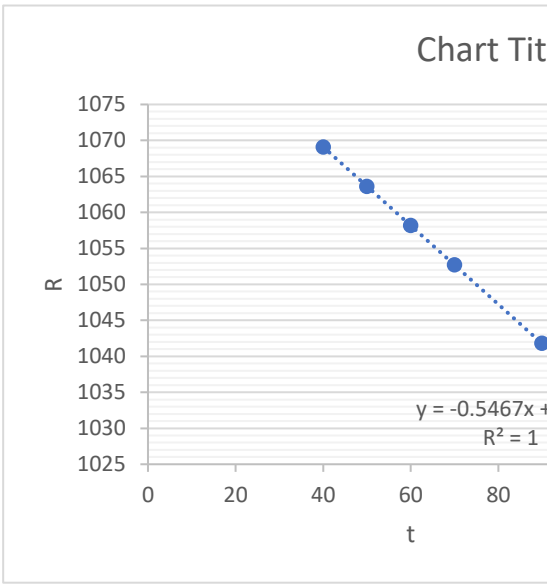
COEFF	MATRIX	VARIABLE	VALUE
520	7	A	7352.5
42800	520	B	543905

INVERSE		VALUE
-0.01781	0.00024	7352.5
1.465753	-0.01781	543905

A	-0.54675	Therefore, line quuati
B	1090.973	Y=-0.55X+1090.97

t(X)	R(Y)	Y'	Y-Y'	(Y-Y')^2
40	1069.1	1068.97	0.13	0.0169
50	1063.6	1063.47	0.13	0.0169
60	1058.2	1057.97	0.23	0.0529
70	1052.7	1052.47	0.23	0.0529
90	1041.8	1041.47	0.33	0.1089
100	1036.3	1035.97	0.33	0.1089
110	1030.8	1030.47	0.33	0.1089

mean squared error, MSE: 0.066614



Y(80)=1047.264

NAME: AMISHA PATRA

USN: 1DS20ETOO7

SUBJECT: DIT
SUBJECT CODE: 19ET3DCDIT

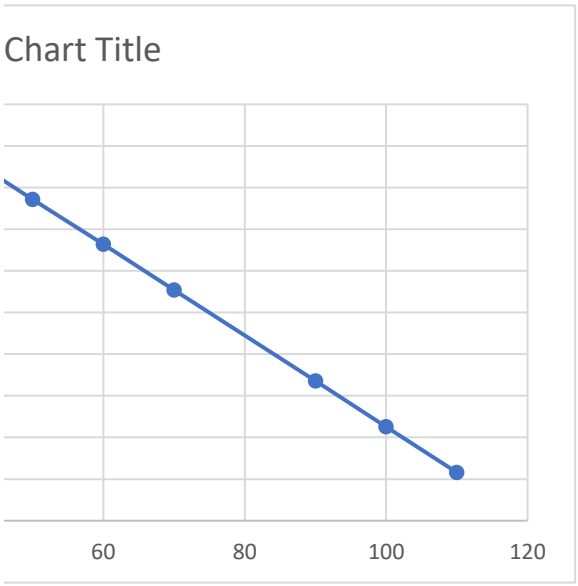
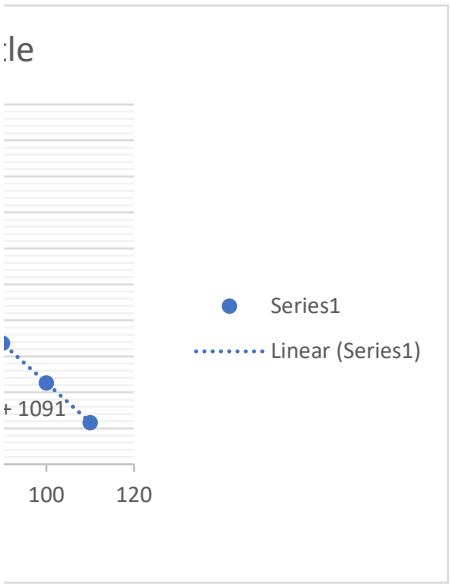


Chart Title
60
80
100
120


le
1091
100
120
Series1
Linear (Series1)