

## Task1

Formül :  $y'=b+wx$

Burada  $b=275$  ve  $w=90$ . Dolayısıyla model denklemini:

$$y'=275+90x$$

## Task 2 - 3

Deneyim Yılı (x)	Maaş (y)	Maaş Tahmini (y')	Hata (y-y')	Hata Kareleri	Mutlak Hata ( y-y' )
5	600	$275+90 \times 5=725$	-125	15625	125
7	900	905	-5	25	5
3	550	545	5	25	5
3	500	545	-45	2025	45
2	400	455	-55	3025	55
7	950	905	45	2025	45
3	540	545	-5	25	5
10	1200	1175	25	625	25
6	900	815	85	7225	85
4	550	635	-85	7225	85
8	1100	995	105	11025	105
1	460	365	95	9025	95
1	400	365	35	1225	35
9	1000	1085	-85	7225	85
1	380	365	15	225	15

## MSE, RMSE ve MAE Hesaplamaları

MSE :

$$(1 / 15) * (15625 + 25 + 25 + 2025 + 3025 + 2025 + 25 + 625 + 7225 + 7225 + 11025 + 9025 + 1225 + 7225 + 225) = (1 / 15) * 56750 = 3783.33$$

$$\text{RMSE} : \text{square\_root}(3783.33) = 61.51$$

$$\text{MAE} : (1 / 15) * (125 + 5 + 5 + 45 + 55 + 45 + 5 + 25 + 85 + 85 + 105 + 95 + 35 + 85 + 15) = (1 / 15) * 820 = 54.67$$