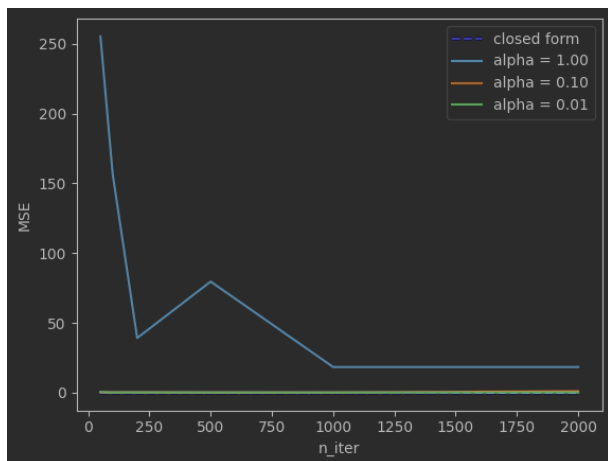
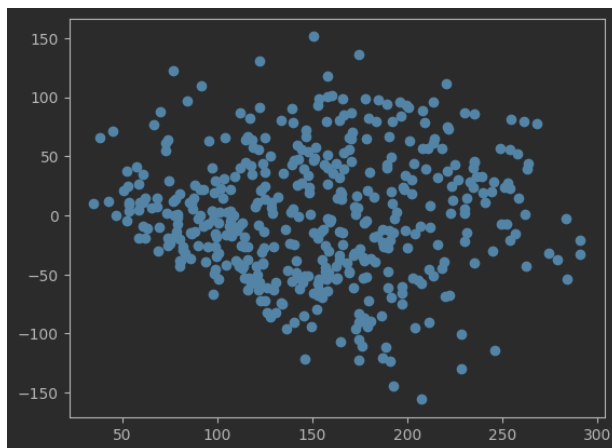


Hand-In Task 3



I think the curves look this way, because if alpha is too big so the MSE gets really large, on the other hand if there is a really small alpha has a small MSE

Task4



I think that the residuals show, that only the independence is really fulfilled, because the samples are distributed in the plot. Linearity, normality and variance is not fulfilled since there is no linear relationship, there is no normal distribution and the distribution gets larger the bigger the x value is.

To answer question 4b, there is a linear relationship between the coefficient and the further away he is from 0, so the most influential features should be s1, s5 and bmi.

The sign shows that there is a negative linear relationship

The feature which I would exclude would be age, since it has the worst linear relationship