

1.

I have created a new variable and his name is renew, he gets 1 if the house got rebuild and 0 if don't, I also removed yr_built and id because they don't have any meaning when they being normalized

2c. 0.009252695

3.

meanknn	sdknn	Kvalue
0.009750183	0.0004677905	1
0.008569448	0.0004312257	3
0.008656749	0.0004021368	5
0.008936733	0.0004102418	7
0.009194241	0.0004280040	9
0.009453086	0.0004360050	11
0.009680628	0.0004380848	13

The best k is when k is equal to 5 because the sd and the Mae are the lowest.

4.

```
> mean(Maecrosslm)
[1] 0.02083409
> sd(Maecrosslm)
[1] 0.0007495961
> mean(Maecrosstree)
[1] 0.02184156
> sd(Maecrosstree)
[1] 0.0006699927
> mean(MaecrossKnn5)
[1] 0.008656749
> sd(MaecrossKnn5)
[1] 0.0004021368
> |
```

I will choose the knn model with k =5 it has significantly lower sd and Mae.