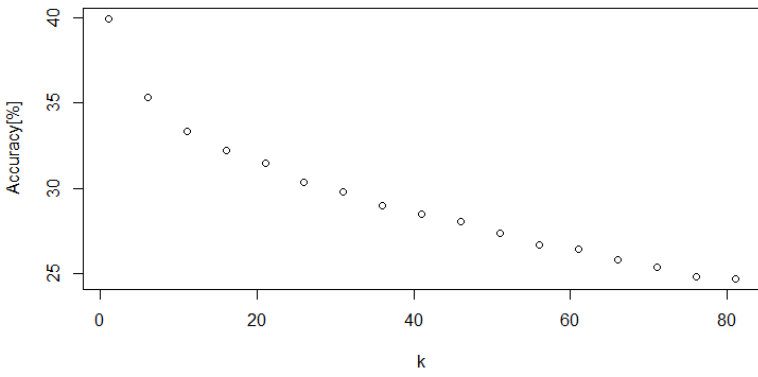
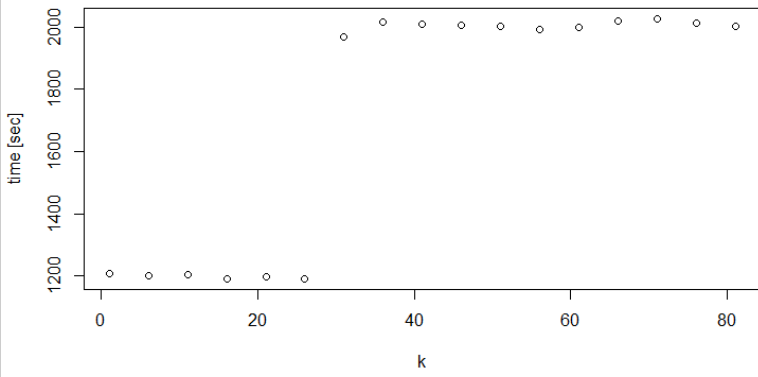
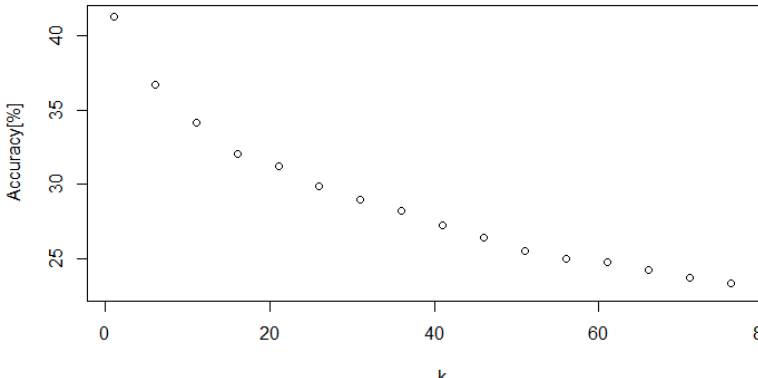
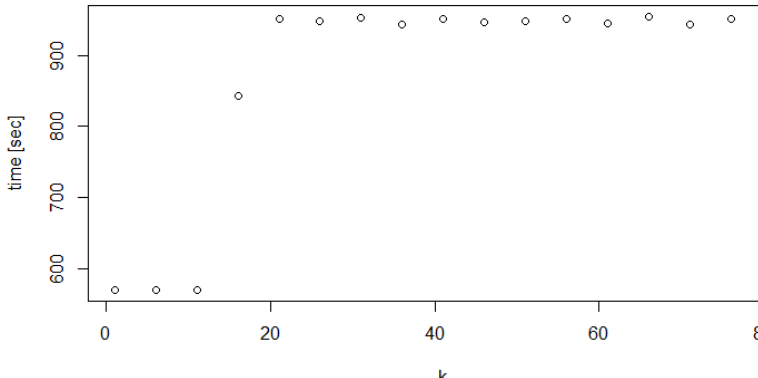


Exercise 3.1

Alec's and Louis' data (person independent) with 17 different ks and different cluster sizes (CPU: 2x 3,0GHz, Duration calculations: 15,23h)

Cluster Size	Performance	Time																																																																								
Cluster Size = 200	<p>Performance</p>  <table><caption>Approximate data for Performance (Cluster Size = 200)</caption><thead><tr><th>k</th><th>Accuracy[%]</th></tr></thead><tbody><tr><td>0</td><td>40.0</td></tr><tr><td>5</td><td>35.5</td></tr><tr><td>10</td><td>33.5</td></tr><tr><td>15</td><td>32.5</td></tr><tr><td>20</td><td>31.5</td></tr><tr><td>25</td><td>30.5</td></tr><tr><td>30</td><td>29.5</td></tr><tr><td>35</td><td>28.5</td></tr><tr><td>40</td><td>28.0</td></tr><tr><td>45</td><td>27.5</td></tr><tr><td>50</td><td>26.5</td></tr><tr><td>55</td><td>26.0</td></tr><tr><td>60</td><td>25.5</td></tr><tr><td>65</td><td>25.0</td></tr><tr><td>70</td><td>24.5</td></tr><tr><td>75</td><td>24.0</td></tr><tr><td>80</td><td>23.5</td></tr></tbody></table>	k	Accuracy[%]	0	40.0	5	35.5	10	33.5	15	32.5	20	31.5	25	30.5	30	29.5	35	28.5	40	28.0	45	27.5	50	26.5	55	26.0	60	25.5	65	25.0	70	24.5	75	24.0	80	23.5	<p>time</p>  <table><caption>Approximate data for time (Cluster Size = 200)</caption><thead><tr><th>k</th><th>time [sec]</th></tr></thead><tbody><tr><td>0</td><td>1200</td></tr><tr><td>5</td><td>1200</td></tr><tr><td>10</td><td>1200</td></tr><tr><td>15</td><td>1180</td></tr><tr><td>20</td><td>1200</td></tr><tr><td>25</td><td>1180</td></tr><tr><td>30</td><td>1950</td></tr><tr><td>35</td><td>2000</td></tr><tr><td>40</td><td>2000</td></tr><tr><td>45</td><td>2000</td></tr><tr><td>50</td><td>1980</td></tr><tr><td>55</td><td>1980</td></tr><tr><td>60</td><td>1980</td></tr><tr><td>65</td><td>2000</td></tr><tr><td>70</td><td>2000</td></tr><tr><td>75</td><td>1980</td></tr><tr><td>80</td><td>1980</td></tr></tbody></table>	k	time [sec]	0	1200	5	1200	10	1200	15	1180	20	1200	25	1180	30	1950	35	2000	40	2000	45	2000	50	1980	55	1980	60	1980	65	2000	70	2000	75	1980	80	1980
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Cluster Size = 100	<p>Performance</p>  <table><caption>Approximate data for Performance (Cluster Size = 100)</caption><thead><tr><th>k</th><th>Accuracy[%]</th></tr></thead><tbody><tr><td>0</td><td>41.0</td></tr><tr><td>5</td><td>36.5</td></tr><tr><td>10</td><td>34.0</td></tr><tr><td>15</td><td>32.0</td></tr><tr><td>20</td><td>31.0</td></tr><tr><td>25</td><td>29.5</td></tr><tr><td>30</td><td>28.5</td></tr><tr><td>35</td><td>27.5</td></tr><tr><td>40</td><td>26.5</td></tr><tr><td>45</td><td>25.5</td></tr><tr><td>50</td><td>25.0</td></tr><tr><td>55</td><td>24.0</td></tr><tr><td>60</td><td>23.5</td></tr><tr><td>65</td><td>23.0</td></tr><tr><td>70</td><td>22.5</td></tr><tr><td>75</td><td>22.0</td></tr><tr><td>80</td><td>21.5</td></tr></tbody></table>	k	Accuracy[%]	0	41.0	5	36.5	10	34.0	15	32.0	20	31.0	25	29.5	30	28.5	35	27.5	40	26.5	45	25.5	50	25.0	55	24.0	60	23.5	65	23.0	70	22.5	75	22.0	80	21.5	<p>time</p>  <table><caption>Approximate data for time (Cluster Size = 100)</caption><thead><tr><th>k</th><th>time [sec]</th></tr></thead><tbody><tr><td>0</td><td>570</td></tr><tr><td>5</td><td>570</td></tr><tr><td>10</td><td>570</td></tr><tr><td>15</td><td>840</td></tr><tr><td>20</td><td>940</td></tr><tr><td>25</td><td>940</td></tr><tr><td>30</td><td>940</td></tr><tr><td>35</td><td>930</td></tr><tr><td>40</td><td>940</td></tr><tr><td>45</td><td>930</td></tr><tr><td>50</td><td>930</td></tr><tr><td>55</td><td>930</td></tr><tr><td>60</td><td>930</td></tr><tr><td>65</td><td>940</td></tr><tr><td>70</td><td>930</td></tr><tr><td>75</td><td>940</td></tr><tr><td>80</td><td>940</td></tr></tbody></table>	k	time [sec]	0	570	5	570	10	570	15	840	20	940	25	940	30	940	35	930	40	940	45	930	50	930	55	930	60	930	65	940	70	930	75	940	80	940
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