Exercise 1

a) 10,66

b)

1	0,273	0,375	0,543
0,273	1	0,392	0,941
0,375	0,392	1	0,909
0,543	0,941	0,909	1

c) There are only positive correlations in the matrix. Which means that for each increas in x there will be an equal increas in y. There are also noticeable high correlations values multiple places in the matrix, which means there are strong correlations between the values.

d) The matrix only gives us information on whether or not there is a correlation, it could be interesting to also see if the correlation is linear or not.

Exircise 2

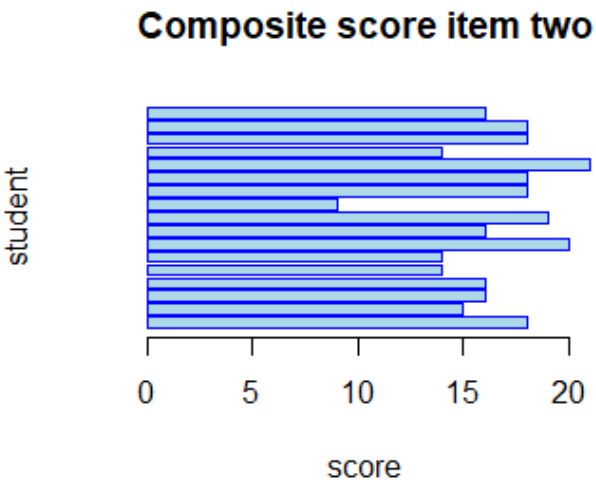
$$7/6 * (1 - (1,3687/3,67)) = 0,736$$

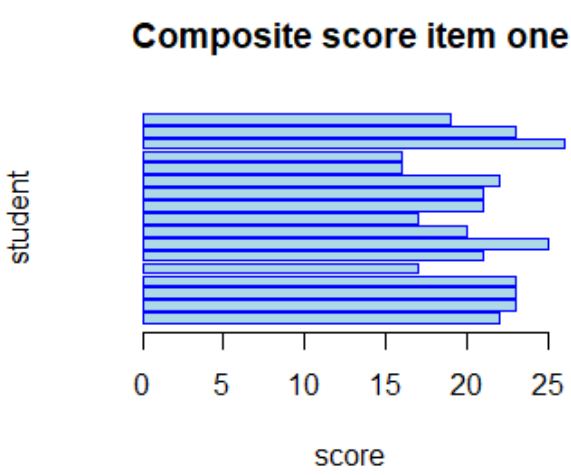
Exircise 3

a) I scored the items in part one from 0-4. 0 beeing “never” and 4 beeing “every day”.
I scored the items in part 2 from 0-3. 0 beeing “never” and 3 beeing “ i am familiar”
In the last part I gave each of the answers different numbers, 1-5 in countries and 1-4 in colours. The item about gender did I make into a dummy variable, where male was given the character 1 and females 0.

b) In the first part I chose the item “use email” where I found the mean, which was 3,882. This indicates that the average student (in this survey) uses their email between at least once a week but closer to every day.
In the second part I chose the item “Nuclear waste” where I found the mean, which was 1,765. This indicates that the average student (in this survey) has heard about nuclear waste and most would be able to explain the general issue.
In the third part I chose the item “Gender” where I found the mean which was 0,6471. Since this is a dummy variable the mean would give us the prosentage of people within the variable represented by the character 1. The results thus explains that of the people who answered the survey, approxomataely 64% were male.

c)


Composite score item two
student
0
5
10
15
20
score


Composite score item one
student
0
5
10
15
20
25
score