

analysis of my grade

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11/04/2020

```
library(dplyr)
```

```
##  
## Attaching package: 'dplyr'  
  
## The following objects are masked from 'package:stats':  
##  
##     filter, lag  
  
## The following objects are masked from 'package:base':  
##  
##     intersect, setdiff, setequal, union
```

```
library(readr)
```

import csv file

```
grades <- read.csv("grades.csv")  
grades
```

```
##           Course.Sub.category  
## 1           Basic Subjects 1  
## 2           Basic Subjects 1  
## 3           Basic Subjects 1  
## 4           Basic Subjects 1  
## 5           Basic Subjects 1  
## 6           Basic Subjects 1  
## 7 International General Education 2  
## 8 International General Education 2  
## 9 International General Education 2  
## 10 International General Education 2  
## 11          Second Foreign Language  
## 12          Second Foreign Language  
## 13          Second Foreign Language  
## 14          Second Foreign Language  
## 15          Second Foreign Language  
## 16          Second Foreign Language
```

## 17	Second Foreign Language
## 18	Second Foreign Language
## 19	Information Literacy and Processing
## 20	Health and Sports
## 21	Health and Sports
## 22	Basic Major Subjects (Compulsory)
## 23	Basic Major Subjects (Compulsory)
## 24	Basic Major Subjects (Compulsory)
## 25	Basic Major Subjects (Compulsory)
## 26	Basic Major Subjects (Compulsory)
## 27	Basic Major Subjects (Compulsory)
## 28	Basic Major Subjects (Compulsory)
## 29	Basic Major Subjects (Compulsory)
## 30	Basic Major Subjects (Compulsory)
## 31	Basic Major Subjects (Compulsory)
## 32	Basic Major Subjects (Compulsory)
## 33	Basic Major Subjects (Partly Elective)
## 34	Basic Major Subjects (Partly Elective)
## 35	Basic Major Subjects (Partly Elective)
## 36	Basic Major Subjects (Partly Elective)
## 37	Basic Major Subjects (Partly Elective)
## 38	Major Subjects (Compulsory)
## 39	Major Subjects (Compulsory)
## 40	Major Subjects (Compulsory)
## 41	Major Subjects (Compulsory)
## 42	Major Subjects (Compulsory)
## 43	Major Subjects (Compulsory)
## 44	Major Subjects (Compulsory)
## 45	Major Subjects (Compulsory)
## 46	Major Subjects (Compulsory)
## 47	Major Subjects (Compulsory)
## 48	Major Subjects (Compulsory)
## 49	Major Subjects (Compulsory)
## 50	Major Subjects (Compulsory)
## 51	Major Subjects (Compulsory)
## 52	Major Subjects (Compulsory)
## 53	Major Subjects (Compulsory)
## 54	Major Subjects (Compulsory)
## 55	Major Subjects (Entirely Elective)
## 56	Major Subjects (Entirely Elective)
## 57	Major Subjects (Entirely Elective)
## 58	Major Subjects (Entirely Elective)
## 59	Major Subjects (Entirely Elective)
## 60	Major Subjects (Entirely Elective)
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## 65	Major Subjects (Entirely Elective)
## 66	Major Subjects (Entirely Elective)
## 67	Major Subjects (Entirely Elective)
## 68	Major Subjects (Entirely Elective)
## 69	Major Subjects (Entirely Elective)
## 70	Major Subjects (Entirely Elective)

## 71	Major Subjects (Entirely Elective)		
##		Course.Name	Credits Year.Completed
## 1	Academic Writing I	2	2017
## 2	Critical Thinking Skills	2	2017
## 3	Presentation Skills	2	2017
## 4	Computers in Language Learning	2	2017
## 5	Second Language Learning with Online Resources	2	2018
## 6	Science and Society	2	2017
## 7	International Communication Seminar (Japanese) 103	2	2017
## 8	International Communication Seminar (Japanese) 203	2	2018
## 9	International Communication Seminar (Japanese) 303	2	2018
## 10	International Communication Seminar (Japanese) 403	2	2019
## 11	Japanese Language 101	1	2017
## 12	Japanese Language 102	1	2017
## 13	Japanese Language 201	1	2018
## 14	Japanese Language 202	1	2018
## 15	Japanese Language 301	1	2018
## 16	Japanese Language 302	1	2018
## 17	Japanese Language 401	1	2019
## 18	Japanese Language 402	1	2019
## 19	Information Literacy	2	2017
## 20	Health & Sports 1	1	2017
## 21	Health & Sports 2	1	2018
## 22	Introductory Biology 1	2	2017
## 23	Introductory Chemistry 1	2	2017
## 24	Introductory Physics 1	2	2017
## 25	Mathematics 1	2	2017
## 26	Basic Biology Experiments	1	2018
## 27	Basic Physics Experiments	1	2018
## 28	Introductory Biology 2	2	2018
## 29	Introductory Chemistry 2	2	2018
## 30	Introductory Physics 2	2	2018
## 31	Mathematics 2	2	2018
## 32	Introductory Chemistry Experiments	1	2018
## 33	Exercise Session (Introductory Biology 1)	2	2017
## 34	Exercise Session (Introductory Biology 2)	2	2018
## 35	Exercise Session (Introductory Chemistry 1)	2	2017
## 36	Exercise Session (Introductory Chemistry 2)	2	2018
## 37	Exercise Session (Mathematics)	2	2017
## 38	Combined Major Basic Seminar 1	1	2017
## 39	General Guidelines for Safety in the Laboratory	1	2018
## 40	Biochemistry 1	2	2019
## 41	Bioinformatics	2	2018
## 42	Cell Biology 1	2	2018
## 43	Organic Chemistry 1	2	2018
## 44	Physical Chemistry 1	2	2018
## 45	Chemistry & Biology Experiments 1	3	2019
## 46	Exercise Session (Bioinformatics)	2	2018
## 47	Exercise Session (Biochemistry 1)	2	2019
## 48	Exercise Session (Cell Biology 1)	2	2018
## 49	Exercise Session (Organic Chemistry 1)	2	2018
## 50	Exercise Session (Physical Chemistry 1)	2	2018
## 51	Analytical Chemistry 1	1	2018
## 52	Exercise Session (Analytical Chemistry 1)	1	2018

## 53	Inorganic Chemistry 1	1	2018
## 54	Exercise Session(Inorganic Chemistry 1)	1	2018
## 55	Combined Major Basic Seminar 2	1	2018
## 56	Cell Biology 2	2	2019
## 57	Molecular Genetics	2	2019
## 58	Organic Chemistry 2	2	2019
## 59	Chemistry & Biology Experiments 2	3	2019
## 60	Organic Chemistry 3	2	2019
## 61	Combined Major Honor Seminar 4	1	2019
## 62	Combined Major Honor Seminar 5	1	2019
## 63	Marine Biology Field Work	2	2018
## 64	Exercise Session (Molecular Genetics)	2	2019
## 65	Exercise Session (Cell Biology 2)	2	2019
## 66	Exercise Session (Organic Chemistry 2)	2	2019
## 67	Exercise Session (Organic Chemistry 3)	2	2019
## 68	Analytical Chemistry 2	1	2019
## 69	Exercise Session(Analytical Chemistry 2)	1	2019
## 70	Analytical Chemistry 3	1	2019
## 71	Exercise Session(Analytical Chemistry 3)	1	2019
##	Semester.Completed grade.in.words		
## 1	Winter Term	S	
## 2	Winter Term	A	
## 3	Winter Term	S	
## 4	Winter Term	S	
## 5	Summer Term	A	
## 6	Winter Term	S	
## 7	Winter Term	S	
## 8	Summer Term	S	
## 9	Winter Term	S	
## 10	Summer Term	A	
## 11	Winter Term	S	
## 12	Winter Term	S	
## 13	Summer Term	S	
## 14	Summer Term	S	
## 15	Winter Term	S	
## 16	Winter Term	S	
## 17	Summer Term	A	
## 18	Summer Term	A	
## 19	Winter Term	S	
## 20	Winter Term	S	
## 21	Summer Term	S	
## 22	Winter Term	S	
## 23	Winter Term	S	
## 24	Winter Term	S	
## 25	Winter Term	A	
## 26	Summer Term	S	
## 27	Summer Term	S	
## 28	Summer Term	S	
## 29	Summer Term	S	
## 30	Summer Term	S	
## 31	Summer Term	S	
## 32	Spring Term	S	
## 33	Winter Term	S	
## 34	Summer Term	S	

## 35	Winter Term	S
## 36	Summer Term	A
## 37	Winter Term	S
## 38	Winter Term	A
## 39	Summer Term	S
## 40	Summer Term	S
## 41	Winter Term	S
## 42	Winter Term	S
## 43	Winter Term	S
## 44	Winter Term	S
## 45	Summer Term	A
## 46	Winter Term	S
## 47	Summer Term	S
## 48	Winter Term	S
## 49	Winter Term	S
## 50	Winter Term	S
## 51	Winter Term	S
## 52	Winter Term	S
## 53	Winter Term	S
## 54	Winter Term	S
## 55	Summer Term	S
## 56	Summer Term	S
## 57	Winter Term	S
## 58	Summer Term	S
## 59	Winter Term	A
## 60	Winter Term	S
## 61	Summer Term	S
## 62	Winter Term	A
## 63	Summer Term	A
## 64	Winter Term	S
## 65	Summer Term	S
## 66	Summer Term	S
## 67	Winter Term	S
## 68	Summer Term	S
## 69	Spring Term	S
## 70	Winter Term	S
## 71	Winter Term	S

add subject GPA column

```
grades.s <- grades%>%
  filter(grade.in.words == "S")%>%
  mutate(sub_gpa = 4)
grades.a <- grades%>%
  filter(grade.in.words == "A")%>%
  mutate(sub_gpa = 3)
grades <- grades.s%>%
  bind_rows(grades.a)
```

add total gpa column

```
grades <- grades%>%  
  mutate(tol_gpa = sub_gpa * Credits)  
grades
```

```
##           Course.Sub.category  
## 1           Basic Subjects 1  
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## 38          Major Subjects (Compulsory)  
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## 43          Major Subjects (Compulsory)  
## 44          Major Subjects (Compulsory)  
## 45          Major Subjects (Compulsory)  
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```

## 47	Major Subjects (Entirely Elective)		
## 48	Major Subjects (Entirely Elective)		
## 49	Major Subjects (Entirely Elective)		
## 50	Major Subjects (Entirely Elective)		
## 51	Major Subjects (Entirely Elective)		
## 52	Major Subjects (Entirely Elective)		
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## 54	Major Subjects (Entirely Elective)		
## 55	Major Subjects (Entirely Elective)		
## 56	Major Subjects (Entirely Elective)		
## 57	Major Subjects (Entirely Elective)		
## 58	Major Subjects (Entirely Elective)		
## 59	Major Subjects (Entirely Elective)		
## 60	Basic Subjects 1		
## 61	Basic Subjects 1		
## 62	International General Education 2		
## 63	Second Foreign Language		
## 64	Second Foreign Language		
## 65	Basic Major Subjects (Compulsory)		
## 66	Basic Major Subjects (Partly Elective)		
## 67	Major Subjects (Compulsory)		
## 68	Major Subjects (Compulsory)		
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## 3	Computers in Language Learning	2	2017
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## 5	International Communication Seminar (Japanese) 103	2	2017
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## 7	International Communication Seminar (Japanese) 303	2	2018
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## 9	Japanese Language 102	1	2017
## 10	Japanese Language 201	1	2018
## 11	Japanese Language 202	1	2018
## 12	Japanese Language 301	1	2018
## 13	Japanese Language 302	1	2018
## 14	Information Literacy	2	2017
## 15	Health & Sports 1	1	2017
## 16	Health & Sports 2	1	2018
## 17	Introductory Biology 1	2	2017
## 18	Introductory Chemistry 1	2	2017
## 19	Introductory Physics 1	2	2017
## 20	Basic Biology Experiments	1	2018
## 21	Basic Physics Experiments	1	2018
## 22	Introductory Biology 2	2	2018
## 23	Introductory Chemistry 2	2	2018
## 24	Introductory Physics 2	2	2018
## 25	Mathematics 2	2	2018
## 26	Introductory Chemistry Experiments	1	2018
## 27	Exercise Session (Introductory Biology 1)	2	2017
## 28	Exercise Session (Introductory Biology 2)	2	2018

## 29	Exercise Session (Introductory Chemistry 1)	2	2017
## 30	Exercise Session (Mathematics)	2	2017
## 31	General Guidelines for Safety in the Laboratory	1	2018
## 32	Biochemistry 1	2	2019
## 33	Bioinformatics	2	2018
## 34	Cell Biology 1	2	2018
## 35	Organic Chemistry 1	2	2018
## 36	Physical Chemistry 1	2	2018
## 37	Exercise Session (Bioinformatics)	2	2018
## 38	Exercise Session (Biochemistry 1)	2	2019
## 39	Exercise Session (Cell Biology 1)	2	2018
## 40	Exercise Session (Organic Chemistry 1)	2	2018
## 41	Exercise Session (Physical Chemistry 1)	2	2018
## 42	Analytical Chemistry 1	1	2018
## 43	Exercise Session (Analytical Chemistry 1)	1	2018
## 44	Inorganic Chemistry 1	1	2018
## 45	Exercise Session (Inorganic Chemistry 1)	1	2018
## 46	Combined Major Basic Seminar 2	1	2018
## 47	Cell Biology 2	2	2019
## 48	Molecular Genetics	2	2019
## 49	Organic Chemistry 2	2	2019
## 50	Organic Chemistry 3	2	2019
## 51	Combined Major Honor Seminar 4	1	2019
## 52	Exercise Session (Molecular Genetics)	2	2019
## 53	Exercise Session (Cell Biology 2)	2	2019
## 54	Exercise Session (Organic Chemistry 2)	2	2019
## 55	Exercise Session (Organic Chemistry 3)	2	2019
## 56	Analytical Chemistry 2	1	2019
## 57	Exercise Session (Analytical Chemistry 2)	1	2019
## 58	Analytical Chemistry 3	1	2019
## 59	Exercise Session (Analytical Chemistry 3)	1	2019
## 60	Critical Thinking Skills	2	2017
## 61	Second Language Learning with Online Resources	2	2018
## 62	International Communication Seminar (Japanese) 403	2	2019
## 63	Japanese Language 401	1	2019
## 64	Japanese Language 402	1	2019
## 65	Mathematics 1	2	2017
## 66	Exercise Session (Introductory Chemistry 2)	2	2018
## 67	Combined Major Basic Seminar 1	1	2017
## 68	Chemistry & Biology Experiments 1	3	2019
## 69	Chemistry & Biology Experiments 2	3	2019
## 70	Combined Major Honor Seminar 5	1	2019
## 71	Marine Biology Field Work	2	2018
##	Semester.Completed grade.in.words sub_gpa tol_gpa		
## 1	Winter Term S 4 8		
## 2	Winter Term S 4 8		
## 3	Winter Term S 4 8		
## 4	Winter Term S 4 8		
## 5	Winter Term S 4 8		
## 6	Summer Term S 4 8		
## 7	Winter Term S 4 8		
## 8	Winter Term S 4 4		
## 9	Winter Term S 4 4		
## 10	Summer Term S 4 4		

## 11	Summer Term	S	4	4
## 12	Winter Term	S	4	4
## 13	Winter Term	S	4	4
## 14	Winter Term	S	4	8
## 15	Winter Term	S	4	4
## 16	Summer Term	S	4	4
## 17	Winter Term	S	4	8
## 18	Winter Term	S	4	8
## 19	Winter Term	S	4	8
## 20	Summer Term	S	4	4
## 21	Summer Term	S	4	4
## 22	Summer Term	S	4	8
## 23	Summer Term	S	4	8
## 24	Summer Term	S	4	8
## 25	Summer Term	S	4	8
## 26	Spring Term	S	4	4
## 27	Winter Term	S	4	8
## 28	Summer Term	S	4	8
## 29	Winter Term	S	4	8
## 30	Winter Term	S	4	8
## 31	Summer Term	S	4	4
## 32	Summer Term	S	4	8
## 33	Winter Term	S	4	8
## 34	Winter Term	S	4	8
## 35	Winter Term	S	4	8
## 36	Winter Term	S	4	8
## 37	Winter Term	S	4	8
## 38	Summer Term	S	4	8
## 39	Winter Term	S	4	8
## 40	Winter Term	S	4	8
## 41	Winter Term	S	4	8
## 42	Winter Term	S	4	4
## 43	Winter Term	S	4	4
## 44	Winter Term	S	4	4
## 45	Winter Term	S	4	4
## 46	Summer Term	S	4	4
## 47	Summer Term	S	4	8
## 48	Winter Term	S	4	8
## 49	Summer Term	S	4	8
## 50	Winter Term	S	4	8
## 51	Summer Term	S	4	4
## 52	Winter Term	S	4	8
## 53	Summer Term	S	4	8
## 54	Summer Term	S	4	8
## 55	Winter Term	S	4	8
## 56	Summer Term	S	4	4
## 57	Spring Term	S	4	4
## 58	Winter Term	S	4	4
## 59	Winter Term	S	4	4
## 60	Winter Term	A	3	6
## 61	Summer Term	A	3	6
## 62	Summer Term	A	3	6
## 63	Summer Term	A	3	3
## 64	Summer Term	A	3	3

## 65	Winter Term	A	3	6
## 66	Summer Term	A	3	6
## 67	Winter Term	A	3	3
## 68	Summer Term	A	3	9
## 69	Winter Term	A	3	9
## 70	Winter Term	A	3	3
## 71	Summer Term	A	3	6

calculate average gpa

```
total_points <- sum(grades$tot_gpa)
total_credits <- sum(grades$Credits)
average_gpa <- total_points / total_credits

print(paste0("My average GPA up til now is: ", average_gpa))
```

```
## [1] "My average GPA up til now is: 3.8135593220339"
```