

Create a data set called hw8.txt with the data below.

M100101 Armann

45 47

42

M100102 Ellery

38 40

39

M100103 Anna

38 43

35

M100104 Tomo

30 40

32

M100301 Glenn

35

43

M100302 Duc

30

39

M100303 Woo

32

40

M100304 Olson

38

44

M100305 Ma

28

29

M100306 Garcia

33

39

The first line (and every three lines after that) has a variable which start with M and has length 7. This is the ID for each student. The first 4 characters are for the course name. The next character is course section. The last two characters are unique for each student.

If the student is in section 1 then the next line of the data is two exam scores (out of 50) and the next line is the final exam score (out of 50).

If the student is in section 3 then the next line of the data is the midterm score (out of 40) and the next line is the final score (out of 50).

Add this information to HW 7 data. Then calculate one score (a percentage) for each student based on all of their scores. Use the cutoffs from your Math 338 syllabus and proc format to assign the letter grades.

Math 100 – 1	
Quizzes	25%
Homework	15%
Exam1	20%
Exam2	20%
Final	20%

Math 100 – 3	
Quizzes	20%
Homework	20%
Midterm	30%
Final	30%

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/**Reading_data_HW7**Nhi_Vu**/

data HW7;
infile '\\Client\H$\Desktop\Math338\data\HW7.txt';
input se 5 ID $6-7 @8 n $ ;

if se = 1 then input #2 Quiz1-Quiz6 #3 HW1-HW3;
qc1=mean(of Quiz1-Quiz6)*0.25/10; * 25% contribution of quiz
(out of 10);
hc1=mean(of HW1-HW3)*0.15/15; * 15% contribution of
homework(out of 15);

if se = 3 then input #2 HW1-HW4 #3 Quiz1-Quiz7 ;
qc3=mean(of Quiz1-Quiz7)*0.2/10; * 20% contribution of quiz
(out of 10);
hc3=mean(of HW1-HW4)*0.2/15; * 20% contribution of
homework (out of 15)

label se="Section"
ID= "ID student"
n="Student Name"
qc1="Quiz (out of 25%)"
hc1="Homework (out of 15%)"
qc3="Quiz (out of 20%)"
hc3="Homework (out of 20%)";

run;

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/**Reading_data_HW8**Nhi_Vu**/

data HW8;
infile '\\Client\C$\Users\nhivutu\Desktop\Math338\data\hw8.txt';
input se 5 ID $6-7 @8 n $ ;

if se = 1 then input #2 exam1-exam2 #3 final;
    e1=exam1*0.2/50; * 20% contribution of exam 1 (out of 50);
    e2=exam2*0.2/50; * 20% contribution of exam 2 (out of 50);
    f1=final*0.2/50; * 20% contribution of final (out of 50);

if se= 3 then input #2 midterm #3 final ;
    m = midterm*0.3/40;* 30% contribution of midterm (out of 40);
    f3=final*0.3/50; * 30% contribution of final (out of 50);

label e1="Exam 1(out of 20%)"
      e2="Exam 2(out of 20%)"
      f1="Final(out of 20%)"
      m ="Midterm (out of 30%)"
      f3="Final (out of 30%)";

run;

proc format;
picture g 86- 100 = '000.00% ' " (A) "
          76- <86 = '000.00% ' " (B) "
          66- <76 = '000.00% ' " (C) "
          54- <66 = '000.00% ' " (D) "
          0- <54 = '000.00% ' " (F) ";

run;

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/****Section_1****Nhi_Vu****/

data section1;
merge HW7 HW8;
score=(hc1+qc1+e1+e2+f1)*100;
if se =1 then output;
label score ="Total score (grade leter)";
format score g.
      hc1 percent8.2
      qc1 percent8.2
      e1-e2 percent8.2
      f1 percent8.2 ;

run;

proc print data= section1 label noobs;
title "Grade for M100 Section 1";
var ID n hc1 qc1 e1 e2 f1 score;
run;

```

Grade for M100 Section 1

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ID student	Student Name	Homework (out of 15%)	Quiz (out of 25%)	Exam 1(out of 20%)	Exam 2 (out of 20%)	Final (out of 20%)	Total score (grade leter)	
01	Armann	12.67%	23.75%	18.00%	18.80%	16.80%	90.01%	(A)
02	Ellery	11.33%	17.50%	15.20%	16.00%	15.60%	75.63%	(C)
03	Anna	10.67%	19.17%	15.20%	17.20%	14.00%	76.23%	(B)
04	Tomo	12.00%	19.58%	12.00%	16.00%	12.80%	72.38%	(C)

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/****Section_3****Nhi_Vu****/
data section3;
merge HW7 HW8;
score3=(hc3+qc3+f3+m)*100;
if se = 3 then output;
label score3 ="Total score (grade leter)";
format score3 g.
       hc3 percent8.2
       qc3 percent8.2
       m percent8.2
       f3 percent8.2;

run;

proc print data= section3 label noobs;
title "Grade for M100 Section 3";
var ID n hc3 qc3 m f3 score3;
run;

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Grade for M100 Section 3						09:53 Thursday, May 6, 2021 1	
ID student	Student Name	Homework (out of 20%)	Quiz (out of 20%)	Midterm (out of 30%)	Final (out of 30%)	Total score (grade leter)	
01	Glenn	13.00%	13.14%	26.25%	25.80%	78.19%	(B)
02	Duc	16.00%	19.14%	22.50%	23.40%	81.04%	(B)
03	Woo	16.67%	16.57%	24.00%	24.00%	81.23%	(B)
04	Olson	14.33%	16.86%	28.50%	26.40%	86.09%	(A)
05	Ma	17.00%	19.43%	21.00%	17.40%	74.82%	(C)
06	Garcia	17.67%	18.00%	24.75%	23.40%	83.81%	(B)