

```

proc format;
  invalue GPA
    "A"=4.0
    "A-"=3.7
    "B+"=3.4
    "B"=3.0
    "B-"=2.7
    "C+"=2.4
    "C"=2
    "C-"=1.7
    "D+"=1.4
    "D"=1
    "D-"=.7
    "E"=0
    other=0
  ;

data i175; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/175.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i176; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/176.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i177; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/177.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i179; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/179.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i180; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/180.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i182; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/182.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i183; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/183.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i184; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/184.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i185; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/185.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i186; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/186.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;
  GPAgrade=input(Grade,GPA.); RUN; data i187; length ID $5 Course $ 9;
  infile "/home/greenberg29390/224 final/187.txt" delimiter="@";
  input ID $ Date Course $ Credits Grade $;

```

```
GPAgrade=input(Grade,GPA.); RUN; data i188; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/188.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i189; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/189.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i190; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/190.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i191; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/191.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i192; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/192.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i276; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/276.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i283; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/283.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i284; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/284.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i285; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/285.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i286; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/286.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i287; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/287.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i288; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/288.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i289; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/289.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i290; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/290.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i291; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/291.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i292; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/292.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i378; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/378.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
```

```

GPAgrade=input(Grade,GPA.); RUN; data i383; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/383.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i384; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/384.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i385; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/385.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i386; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/386.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i387; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/387.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i388; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/388.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i389; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/389.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i390; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/390.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i391; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/391.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i392; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/392.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i574; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/574.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i575; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/575.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i576; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/576.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i577; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/577.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i578; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/578.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i579; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/579.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i581; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/581.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;

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```

GPAgrade=input(Grade,GPA.); RUN; data i582; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/582.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i583; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/583.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i584; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/584.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i585; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/585.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i586; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/586.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i587; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/587.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i588; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/588.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i589; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/589.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i590; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/590.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i591; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/591.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN; data i592; length ID $5 Course $ 9;
infile "/home/greenberg29390/224 final/592.txt" delimiter="@";
input ID $ Date Course $ Credits Grade $;
GPAgrade=input(Grade,GPA.); RUN;

```

```

%macro create(numAs);
%DO q=175 %TO &numAs %BY 1;
Alter Table total&q.GPA ADD column INT;
Update Total&q.GPA set column=&q ;
%end;
%mend;

```

```

proc sql noerrorstop;
create table total175GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i175
group by ID order by ID ; create table total176GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i176
group by ID order by ID ; create table total177GPA as

```

```

select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i177
group by ID order by ID ; create table total179GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i179
group by ID order by ID ; create table total180GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i180
group by ID order by ID ; create table total182GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i182
group by ID order by ID ; create table total183GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i183
group by ID order by ID ; create table total184GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i184
group by ID order by ID ; create table total185GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i185
group by ID order by ID ; create table total186GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i186
group by ID order by ID ; create table total187GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i187
group by ID order by ID ; create table total188GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i188
group by ID order by ID ; create table total189GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i189
group by ID order by ID ; create table total190GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i190
group by ID order by ID ; create table total191GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i191
group by ID order by ID ; create table total192GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i192
group by ID order by ID ; create table total276GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i276
group by ID order by ID ; create table total283GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i283
group by ID order by ID ; create table total284GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i284
group by ID order by ID ; create table total285GPA as

```



```

select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i285
group by ID order by ID ; create table total286GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i286
group by ID order by ID ; create table total287GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i287
group by ID order by ID ; create table total288GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i288
group by ID order by ID ; create table total289GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i289
group by ID order by ID ; create table total290GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i290
group by ID order by ID ; create table total291GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i291
group by ID order by ID ; create table total292GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i292
group by ID order by ID ; create table total378GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i378
group by ID order by ID ; create table total383GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i383
group by ID order by ID ; create table total384GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i384
group by ID order by ID ; create table total385GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i385
group by ID order by ID ; create table total386GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i386
group by ID order by ID ; create table total387GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i387
group by ID order by ID ; create table total388GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i388
group by ID order by ID ; create table total389GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i389
group by ID order by ID ; create table total390GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i390
group by ID order by ID ; create table total391GPA as

```

```

select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i391
group by ID order by ID ; create table total392GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i392
group by ID order by ID ; create table total574GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i574
group by ID order by ID ; create table total575GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i575
group by ID order by ID ; create table total576GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i576
group by ID order by ID ; create table total577GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i577
group by ID order by ID ; create table total578GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i578
group by ID order by ID ; create table total579GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i579
group by ID order by ID ; create table total581GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i581
group by ID order by ID ; create table total582GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i582
group by ID order by ID ; create table total583GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i583
group by ID order by ID ; create table total584GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i584
group by ID order by ID ; create table total585GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i585
group by ID order by ID ; create table total586GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i586
group by ID order by ID ; create table total587GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i587
group by ID order by ID ; create table total588GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i588
group by ID order by ID ; create table total589GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i589
group by ID order by ID ; create table total590GPA as

```

```
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i590
group by ID order by ID ; create table total591GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i591
group by ID order by ID ; create table total592GPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from i592;
```

```
%Create(592);
```

```
quit;
```

```
PROC DATASETS;
DELETE gpacombined;
RUN;
```

```
%macro create(numBs);
%DO q=175 %TO &numBs %BY 1;
PROC APPEND BASE=gpacombined data=total&q.GPA Force NOWARN; Run;
%end;
%mend;
```

```
%Create(592);
```

```
PROC DATASETS;
DELETE iCOMBINED;
RUN;
```

```
%macro create(numBs);
%DO q=175 %TO &numBs %BY 1;
PROC APPEND BASE=icombed data=i&q Force NOWARN; Run;
%end;
%mend;
```

```
%Create(592);
```

```
proc print data=icombed; run;
```

```
proc sql;
create table istat as
select * from icombined
where Course like "STAT%";

create table imath as
```



```

select * from icombined
where Course like "MATH%";

create table ims as
select * from istat
outer union
select * from imath;

create table totalmsGPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from ims
group by ID
order by ID
;

create table totalGPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as termGPA
from icombined
group by ID
order by ID
;

create table cGPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as GPA, sum(Credits) as Credits
from icombined
group by ID
order by ID
;

create table lGPA as
select * from cgpa where 60 < Credits < 120
order by GPA desc
;

create table tmsGPA as
select ID, sum(GPAgrade*Credits)/sum(Credits) as GPA, sum(Credits) as Credits
from ims
group by ID
order by ID
;

        create table ltmsGPA as
select * from tmsgpa where Credits > 20
order by GPA desc
;

```

```
quit;
```

```
PROC APPEND BASE=gpacombined data=totalGPA Force NOWARN;
RUN;
```

```
ods html file="/home/greenberg29390/224 final/Report1.html";
title report one;
.....
proc print data=gpacombined;
run;
title;

ods html close;
ods html file="/home/greenberg29390/224 final/Report2.html";
title report two;
.....
proc print data=totalmsgpa;
run;
title;
ods html close;
ods html file="/home/greenberg29390/224 final/Report3.html";
title report three;
options obs=9;
.....
proc print data=lgpa;
run;
title;
ods html close;
ods html file="/home/greenberg29390/224 final/Report4.html";
title report four;
options obs=12;
.....
```