```
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 $;
```

```
    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=icombined data=i&q Force NOWARN; Run;
%end;
%mend;

%Create(592);
```

```
proc print data=icombined; 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;
```