```sas
ods pdf file = '/home/u61979420/section6.pdf';
* import all of the student data sets;
data PSTAT130;
infile '/home/u61979420/PSTAT130.txt';
input StudentName $ 1-16;
CourseName = 'PSTAT130';
run;

data POLI125;
infile '/home/u61979420/POLI125.txt';
input StudentName $ 1-16;
CourseName = 'POLI125';
run;

data PSYCH118;
infile '/home/u61979420/PSYCH118.txt';
input StudentName $ 1-16;
CourseName = 'PSYCH118';
run;

/* 1a) Create a dataset called Allstudents with students' name and coursename using
three students' data sets. */
data AllStudents;
set PSTAT130 PSYCH118 POLI125;
run;

*import instructor and classroom sets;
data Instructor;
infile '/home/u61979420/instructors.txt';
input @1 InstructorName $ @16 AcademicRank $ @23 Salary $ @32 CourseName $ @42 FirstClassDate $;
run;
```

```
33  data Classroom;
34  infile '/home/u61979420/classrooms.txt';
35  input @1 BldgName $ @14 RoomNumber $ @19 CourseName $ @29 Days $ @36 Time $;
36  run;
37
38  /* 1b) Combine the Instructor, Classrooms and AllStudents data sets so that each
39  student is paired with his/her instructor and the room information for that class. */
40
41  proc sort data=Instructor;
42     by CourseName;
43  run;
44
45  proc sort data=ClassRoom;
46     by CourseName;
47  run;
48
49  proc sort data=AllStudents;
50     by CourseName;
51  run;
52
53  data pairings;
54     merge AllStudents Classroom Instructor;
55     by CourseName;
56  run;
57
58  /* 1c) Create a 'Roster' for each class showing the names of the students taking that
59  class.
60  i. Separate the lists onto a page for each class.
61  ii. Assign appropriate variable labels for CourseName and StudentName
62  iii. Show only the CourseName at the top of each page, and the list of students
63  names below. */
64
```

```
proc print data= pairings label noobs;
var StudentName;
by CourseName;
label StudentName = 'Student Name' CourseName = 'Course Name';
run;

/* 1d) Create a Class List for each Student showing details of the classes each is taking.
i. Include the variables below
ii. Assign appropriate variable labels
iii. Use an appropriate format for FirstClassDate */

proc sort data = pairings;
by StudentName;
run;

proc print data = pairings label noobs;
var CourseName FirstClassDate InstructorName BldgName RoomNumber Days Time;
by StudentName;
label CourseName = 'Course' FirstClassDate = 'First Class Date' InstructorName = 'Professor' BldgName = 'Building'
RoomNumber = 'Room Number' Days = 'Days' Time = 'Time';
format FirstClassDate $mmddyy8.;
run;

/* 1e) Create a Master List of all Students whose instructor is an Associate Professor.
i. Include the variables in the example on the next page
ii. Assign appropriate variable labels
iii. Create a user-defined format and apply it to academic rank, assigning the label
"Assistant Professor" to "Asst" and "Associate Professor" to "Assoc"
iv. Use an appropriate format for Salary. */

proc format;
value $arank "Assoc" = "Associate Professor"
"Asst" = "Assistant Professor";
run;
```

```sas
85  run;
86
87  /* 1e) Create a Master List of all Students whose instructor is an Associate Professor.
88  i. Include the variables in the example on the next page
89  ii. Assign appropriate variable labels
90  iii. Create a user-defined format and apply it to academic rank, assigning the label
91  "Assistant Professor" to "Asst" and "Associate Professor" to "Assoc"
92  iv. Use an appropriate format for Salary. */
93  proc format;
94  value $arank "Assoc" = "Associate Professor"
95  "Asst" = "Assistant Professor";
96  run;
97
98  proc print data = pairings label noobs;
99  where AcademicRank = 'Assoc';
100 var StudentName CourseName InstructorName AcademicRank Salary;
101 format AcademicRank $arank.;
102 label StudentName = 'Student Name' CourseName = 'Course' InstructorName = 'Instructor'
103 AcademicRank = 'Academic Rank';
104 title 'List of Students for Associate Professors';
105 run;
106 ods pdf close;
```

Course Name=POLI125

Student Name
Lily Yang
Robert Williams
Tracy Jones
Cheryl Smith
Alex Shepard
Trinh Phan
Mary Marcus
Curt Forrest
Andy Potts

Course Name=PSTAT130

Student Name
John Thomas
Elizabeth Smith
Rajesh Krish
Lily Yang
Robert Williams
Tracy Jones
Cheryl Smith
Alex Shepard
Trinh Phan
Lee Barrett
Clark Johnson
Jenny Page
Mary Marcus
Curt Forrest
Andy Potts

Course Name=PSYCH118

Student Name
John Thomas
Elizabeth Smith
Rajesh Krish
Lily Yang
Lee Barrett
Clark Johnson
Jenny Page
Mary Marcus

Course Name=PSYCH118

Student Name
Curt Forrest
Andy Potts

StudentName=Alex Shepard

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00

StudentName=Andy Potts

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Cheryl Smith

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00

StudentName=Clark Johnson

Course	First Class Date	Professor	Building	Room Number	Days	Time
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Curt Forrest

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Elizabeth Smith

Course	First Class Date	Professor	Building	Room Number	Days	Time
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Jenny Page

Course	First Class Date	Professor	Building	Room Number	Days	Time
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=John Thomas

Course	First Class Date	Professor	Building	Room Number	Days	Time
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Lee Barrett

Course	First Class Date	Professor	Building	Room Number	Days	Time
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Lily Yang

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Mary Marcus

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Rajesh Krish

Course	First Class Date	Professor	Building	Room Number	Days	Time
PSTAT130	09/23/10	John	South	518	M/W/F	5:00
PSYCH118	09/24/10	Sigmund	Phelps	222	T/TH	10:00

StudentName=Robert Williams

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00

StudentName=Tracy Jones

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00

StudentName=Trinh Phan

Course	First Class Date	Professor	Building	Room Number	Days	Time
POLI125	09/27/10	Karl	Phelps	126	M/W	2:00
PSTAT130	09/23/10	John	South	518	M/W/F	5:00

List of Students for Associate Professors

Student Name	Course	Instructor	Academic Rank	Salary
Alex Shepard	PSTAT130	John	Associate Professor	$56,000
Andy Potts	PSTAT130	John	Associate Professor	$56,000
Andy Potts	PSYCH118	Sigmund	Associate Professor	$92,000
Cheryl Smith	PSTAT130	John	Associate Professor	$56,000
Clark Johnson	PSTAT130	John	Associate Professor	$56,000
Clark Johnson	PSYCH118	Sigmund	Associate Professor	$92,000
Curt Forrest	PSTAT130	John	Associate Professor	$56,000
Curt Forrest	PSYCH118	Sigmund	Associate Professor	$92,000
Elizabeth Smith	PSTAT130	John	Associate Professor	$56,000
Elizabeth Smith	PSYCH118	Sigmund	Associate Professor	$92,000
Jenny Page	PSTAT130	John	Associate Professor	$56,000
Jenny Page	PSYCH118	Sigmund	Associate Professor	$92,000
John Thomas	PSTAT130	John	Associate Professor	$56,000
John Thomas	PSYCH118	Sigmund	Associate Professor	$92,000
Lee Barrett	PSTAT130	John	Associate Professor	$56,000
Lee Barrett	PSYCH118	Sigmund	Associate Professor	$92,000
Lily Yang	PSTAT130	John	Associate Professor	$56,000
Lily Yang	PSYCH118	Sigmund	Associate Professor	$92,000
Mary Marcus	PSTAT130	John	Associate Professor	$56,000
Mary Marcus	PSYCH118	Sigmund	Associate Professor	$92,000
Rajesh Krish	PSTAT130	John	Associate Professor	$56,000
Rajesh Krish	PSYCH118	Sigmund	Associate Professor	$92,000
Robert Williams	PSTAT130	John	Associate Professor	$56,000
Tracy Jones	PSTAT130	John	Associate Professor	$56,000
Trinh Phan	PSTAT130	John	Associate Professor	$56,000