3) EXERCISES

```
/* INPUT STATEMENT */

data patients;
input Patientno Diagnosis Treatment $ TrtStart Effect;
datalines;
1 5 A 9 16
2 8 B 8 14
3 12 B 14 18
4 16 B 17 21
5 17 A 20 23
6 19 A 20 27
7 23 B 24 30
8 24 A 28 35
9 30 A 32 40
10 32 B 33 37
;
run;



/* INFILE STATEMENT */

/* To find the location of the file in SAS Studio: Find the file in the folder you
uploaded it to, under Server Files and Folders - Files (Home). Right click and
choose Properties. Copy the path from Location (Ctrl/Command+C) and paste it in
your code (Ctrl/Command+V), with quotation marks around it (single or double).
An example of a path is used in the code below, replace that by your own unique
path for each exercise. */

/* 1) */
data patientstxt;
infile '/home/username/SAS introduction/Data/Patients.txt';
input Patientno Diagnosis Treatment $ TrtStart Effect;
run;

/* 2) */
proc import
            dbms=xlsx  /* tells Sas the type of file to be read */
            datafile='/home/username/SAS introduction/Data/Patients.xlsx'
            out=patientsExcel
            replace;
run;



/* THE DATA STEP */

/* 1) */
data patients2; set patients;
TimeDiagnTrt=TrtStart-Diagnosis;
run;

/* 2) */
data patients2; set patients2;
TimeTrtEffect=Effect-TrtStart;
run;
```

```
/* 3) */
data patients2; set patients2;
if TimeTrtEffect <7 then indicator=1;
else indicator=0;
run;

/* 4) */
data patients2; set patients2;
drop indicator;
run;

/* 5) */
libname intro 'X:\My Documents\Multivariat analys\Sas introduction';

data intro.patients; set patients2;
run;

/* 6) */
data patients3; set patients2;
where TimeDiagnTrt<=3 and TimeTrtEffect<7;
run;

/* 7) */
data patients4; set patients2;
where TimeDiagnTrt>3 or TimeTrtEffect>=7;
run;

/* 8) */
data patients5;
merge patients3 patients4;
by patientno;
run;



/* SAS PROCEDURES */

/* 1) */
proc means data=patients2;
var TimeDiagnTrt TimeTrtEffect;
by Treatment;
run;
/* ERROR: Data set WORK.PATIENTS2 is not sorted in ascending sequence. The current
BY group has Treatment = B and the next BY group has Treatment = A */

proc sort data=patients2; by Treatment; run; /* Then run proc means above again */

/* 2) */
proc univariate data=patients2;
var TimeDiagnTrt TimeTrtEffect;
by Treatment;
run;

/* 3) */
proc ttest data=patients2;
class treatment;
var TimeTrtEffect;
run;
```