ST2137 (2018/2019 Semester 2)
Partial Solutions/Hints to Questions in Tutorial 1
Note: The solutions provided in this document are for reference only

Question 1

Refer to p2.22-2.23

```
data htwt; infile "~/tut1htwt.csv" delimiter="," firstobs=2;
input id gender $ height weight siblings;
```

Question 2

Refer to p2.29-2.31

```
data htwtf; set htwt; if gender="F" then output;
proc means data=htwtf n; var height;
```

161 females

Question 3

Refer to p2.38-2.40

```
proc sort data=htwt; by id; proc sort data=test; by id;
data htwttest; merge htwt test; by id;
data htwttest184; set htwttest; if height > 184 then output;
proc print data=htwttest184;
```

2 individuals. Test scores are 62 (ID = 160) and 93 (ID = 367).

Question 4

Refer to p2.15-21.8

```
data htwtfixed;   infile "~/tut1htwtfixed.txt" firstobs=2; input id 1-3
gender $ 4 height 5-7 weight 8-9 siblings 10;
```

Question 5

Refer to p2.29-2.31

```
data htwtfixedremo; set htwtfixed; if id ^= 356 then output;
```

Question 6

```
proc sort data=htwttest; by descending height;
data htwttestf; set htwttest; where(gender = "F"); drop gender;
proc print data=htwttestf (firstobs=2 obs=2);
```

ID = 375. Height = 173 cm, weight = 56 kg, test score = 85.

Question 7

Refer to p2.41

```
data htwttestgrade; set htwttest; if test>=80 then grade="A"; else if
test>=70 then grade="B"; else if test>=60 then grade="C"; else if
test>=50 then grade="D"; else grade="F";
data htwttestgrademf; set htwttestgrade; if(gender="M" and grade="F")
then output;
proc means data=htwttestgradefa n;
```

15 males get a “F” grade

Question 8

Refer to p2.40

(a)

```
data t1q8a; do batch = 1 to 3; do treatment=1 to 4; input temperature
@@; output; end; end; datalines;
303 311 289 270
242 290 259 263
289 282 277 257
```

3 variables, batch, treatment and temperature in the SAS data set

(b)

```
data t1q8b; input batch treatment temperature @@; datalines;
1 1 303 1 2 311 1 3 289 1 4 270
2 1 242 2 2 290 2 3 259 2 4 263
3 1 289 3 2 282 3 3 277 3 4 257
```

(c)

```
data t1q8a; do batch = 1 to 3; do treatment=1 to 4; input temperature
@@; output; end; end; datalines;
303 311 289 270
242 . 259 263
289 282 277 257
```