Solution to Exercise 1: An introduction to EpiData Analysis

Key Point(s):

- It is important to make a comment first in the program. This preferably is what you want to do in that program. Comments are preceded by an asterisk and are bypassed by the analysis program.

- The F9 key runs the whole program whilst the F8 key runs only the selected part of the program.

Tasks:

o *Determine the year of birth (new variable created from age and date of registration), then make groups of examinees (another variable) born respectively before 1930, from 1930 to including 1949, 1950 and later, and those without known year of birth.*

o *Use two approaches, one with text field coding and the other with numeric coding and value labels.*

Solution:

The output solution is as follows:

```
. tables sex birthgrp1
```

Examinee's sex

Exercise birth years text coding	Female	Male	Total
1929 and before	6	9	15
1930-1949	14	25	39
1950 and later	83	152	235
Unknown	6	5	11
Total	109	191	300

```
. tables sex birthgrp2
```

Examinee's sex

Exercise birth years numeric coding	Female	Male	Total
Born before 1930	6	9	15
Born 1930 to 1949	14	25	39
Born after 1950	83	152	235
Unknown birth year	6	5	11
Total	109	191	300

The "Task" part of program `B_EX01.PGM` might look as follows:

```
****************************************
* Part B, Exercise 1
* Task
****************************************

cls
close
logclose
```

```
read "a.epx"
append /file="b.epx"
append /file="c.epx"
append /file="d.epx"
savedata "abcd.rec" /replace

close
read "abcd.rec"

* Define the year of birth
define birthyr ####
birthyr=year(regdate)-age
if age=99 or year(regdate)=1900 then birthyr=9999

* Using text variables
* define groupings for birth years
define birthgrp1 _____
                                let birthgrp1="other"
if birthyr                <1930 then birthgrp1="1929 and before"
if birthyr>1929 and birthyr<1950 then birthgrp1="1930-1949"
if birthyr>1949                  then birthgrp1="1950 and later"
if birthyr=9999                  then birthgrp1="Unknown"
label birthgrp1 "Exercise birth years text coding"

* Using numeric variables
* define groupings for birth years
define birthgrp2 #
                                let birthgrp2=8
if birthyr                <1930 then birthgrp2=1
if birthyr>1929 and birthyr<1950 then birthgrp2=2
if birthyr>1949                  then birthgrp2=3
if birthyr=9999                  then birthgrp2=9
label birthgrp2 "Exercise birth years numeric coding"
labelvalue birthgrp2 /1="Born before 1930"
labelvalue birthgrp2 /2="Born 1930 to 1949"
labelvalue birthgrp2 /3="Born after 1950"
labelvalue birthgrp2 /8="Unaccounted for"
labelvalue birthgrp2 /9="Unknown birth year"

cls
tables sex birthgrp1
tables sex birthgrp2
```