

```

221 *****;
222 *f=sasmanual\mb_quest.sas *;
223 * *;
224 *This program assumes that the temporary SAS *;
225 *data set called "test" has been created *;
226 *from the simulated MB Health raw data. *;
227 *****;
228
229 options ls=min;
230
231 *-----QUESTION 1a-----;
232
233 proc print data=test (obs=20);
234   var gender age los op01 diag01 diag02;
235   title1 'SIMULATED MB HEALTH DATA FOR SAS COURSE';
236   title2 'Question 1a';
237 run;

```

NOTE: PROCEDURE PRINT used:
real time 0.17 seconds

```

238
239 *-----QUESTION 1b-----;
240
241 proc sort data=test;
242   by gender regionre;
243 run;

```

NOTE: The data set WORK.TEST has 5000 observations and 33 variables.

NOTE: PROCEDURE SORT used:
real time 0.76 seconds

```

244
245 proc print data=test (obs=40);
246   var ncase gender regionre icd17brk;
247   format gender $genderl. regionre $regionl.
248           icd17brk $icd17l.;
249   title2 'Question 1b';
250 run;

```

NOTE: PROCEDURE PRINT used:
real time 0.44 seconds

```

251
252 *-----QUESTION 2-----;
253
254 proc format;
255   value $wpgf '8' = '1'
256             other = '0';
NOTE: Format $WPGF has been output.
257   value $wpgl '1' = '1.Winnipeg'
258             '0' = '0.non-Wpg';
NOTE: Format $WPGL has been output.
259 run;

```

NOTE: PROCEDURE FORMAT used:
real time 0.00 seconds

```
260
261 *-----QUESTION 3a-----;
262
263 proc means data=test n mean min max maxdec=2;
264   var age los deathsep;
265   title2 'Question 3a';
266 run;
```

```
NOTE: PROCEDURE MEANS used:
      real time          0.88 seconds
```

```
267
268 *-----QUESTION 3b-----;
269
270 proc means data=test n mean min max maxdec=2;
271   var deathsep;
272   where deathsep<9999;
273   title2 'Question 3b';
274 run;
```

```
NOTE: PROCEDURE MEANS used:
      real time          0.21 seconds
```

```
275
276 *-----QUESTION 3c-----;
277
278 proc means data=test n mean min max maxdec=2;
279   var age los;
280   class regionre;
281   format regionre $regionl.;
282   title2 'Question 3c';
283 run;
```

```
NOTE: PROCEDURE MEANS used:
      real time          0.94 seconds
```

```
284
285 *-----QUESTION 4a-----;
286
287 proc freq data=test;
288   tables icd17brk * gender;
289   title2 'Question 4a';
290 run;
```

```
NOTE: PROCEDURE FREQ used:
      real time          0.61 seconds
```

```
291
292 *-----QUESTION 4b-----;
293
294 proc freq data=test;
295   tables icd17brk * gender;
296   format icd17brk $icd17l. gender $genderl.;
297   title2 'Question 4b';
298 run;
```

```
NOTE: PROCEDURE FREQ used:
      real time          0.27 seconds
```

```
299
300 *-----QUESTION 5a-----;
301
302 proc freq data=test;
303     tables incdr * charyes;
304     format incdr $incdrl. charyes $charl.;
305     title2 'Question 5a';
306 run;
```

NOTE: PROCEDURE FREQ used:
real time 0.26 seconds

```
307
308 *-----QUESTION 5b-----;
309
310 proc freq data=test;
311     tables gender * incdr * charyes;
312     format incdr $incdrl. charyes $charl.
313           gender $genderl.;
314     title2 'Question 5b';
315 run;
```

NOTE: PROCEDURE FREQ used:
real time 0.32 seconds

```
316
317 *-----QUESTION 6-----;
318
319 proc format;
320     value losf 0-30 = '1'
321           31-365 = '2'
322           366-high = '3';
NOTE: Format LOSF has been output.
323
324     value $losl '1' = '0-30 days'
325           '2' = '31-365 days'
326           '3' = '366+ days';
NOTE: Format $LOSL has been output.
327 run;
```

NOTE: PROCEDURE FORMAT used:
real time 0.05 seconds

```
328
329 data test;
330     set test;
331
332     loswks = (los/7);
333
334     losgroup = put (los,losf.);
335
336     wpgres = put (regionre,$wpgf.);
337
338     diag3x = substr(diag01,1,3);
339
340     op2x = substr(op01,1,2);
341
342     label loswks = 'Length of stay in weeks'
343           losgroup = 'LOS grouped into 3 categories'
```

```
344      wpgres   = 'Winnipeg residence'
345      diag3x   = '3-digit diagnosis'
346      op2x     = '2-digit procedure';
347
348 run;
```

NOTE: The data set WORK.TEST has 5000 observations and 38 variables.

NOTE: DATA statement used:
real time 0.54 seconds

```
349
350 *-----QUESTION 7-----;
351
352 proc freq data=test;
353     tables los * losgroup/list missing;
354     tables regionre * wpgres /list missing;
355     format losgroup $losl. regionre $regionl. wpgres $wpgl.;
356     title2 'Question 7a: PROC FREQ check';
357 run;
```

NOTE: PROCEDURE FREQ used:
real time 0.49 seconds

```
358
359 proc means data=test n mean min max maxdec=2;
360     var los loswks;
361     title2 'Question 7b: PROC MEANS check';
362 run;
```

NOTE: PROCEDURE MEANS used:
real time 0.16 seconds

```
363
364 proc print data=test (obs=30);
365     var diag01 diag3x op01 op2x;
366     title2 'Question 7c: PROC PRINT check';
367 run;
```

NOTE: PROCEDURE PRINT used:
real time 0.10 seconds

```
368
369 proc contents data=test;
370     title2 'Question 7d: PROC CONTENTS check';
371 run;
```

NOTE: PROCEDURE CONTENTS used:
real time 0.16 seconds