

```
LIBNAME quiz1 "/home/u64004207/EPI5143 - Large Databases";
```

```
/* Step 2: Create a permanent library */
```

```
PROC DATASETS LIB=quiz1;
```

```
RUN;
```

```
QUIT;
```

```
/* Step 3: Use PROC CONTENTS to examine dataset */
```

```
PROC CONTENTS DATA=quiz1.quiz1_data;
```

```
RUN;
```

```
/* Step 4: Use PROC FREQ to analyze diabetes variable */
```

```
PROC FREQ DATA=quiz1.quiz1_data;
```

```
TABLES diabetes;
```

```
RUN;
```

```
/* Step 5: Use PROC UNIVARIATE to analyze X1 */
```

```
PROC UNIVARIATE DATA=quiz1.quiz1_data;
```

```
VAR X1;
```

```
HISTOGRAM X1 / normal;
```

```
RUN;
```

```
/* Step 6: Create a temporary copy of the dataset */
```

```
DATA work.quiz1;
```

```
SET quiz1.quiz1_data;
```

```
RUN;
```

```
/* Step 7: Create mean_V1 and mean_V2 */
```

```
DATA work.quiz1;
```

```
SET work.quiz1;
```

```
mean_V1 = (X1 + X2 + X3) / 3;
```

```
mean_V2 = MEAN(X1, X2, X3);
```

```
RUN;
```

```
/* Step 8: Calculate wait_time */
```

```
DATA work.quiz1;
```

```
SET work.quiz1;
```

```
wait_time = Surgery_dt - Consult_dt;
```

```
RUN;
```

```
/* Step 9: Create X1_high variable */
```

```
PROC MEANS DATA=work.quiz1 MEAN;
```

```
VAR X1;
```

```
OUTPUT OUT=mean_X1_data MEAN=X1_mean;
```

```
RUN;
```

```
DATA work.quiz1;
```

```
  SET work.quiz1;
```

```
  IF _N_ = 1 THEN SET mean_X1_data;
```

```
  X1_high = (X1 >= X1_mean);
```

```
RUN;
```

```
/* Step 10a: Use PROC UNIVARIATE to analyze mean_V1, mean_V2, and wait_time */
```

```
PROC UNIVARIATE DATA=work.quiz1;
```

```
  VAR mean_V1 mean_V2 wait_time;
```

```
  OUTPUT OUT=univ_output MEAN=mean_V1_mean mean_V2_mean wait_time_mean
```

```
    MEDIAN=wait_time_median MIN=wait_time_min MAX=wait_time_max;
```

```
RUN;
```

```
/* Step 10b: Use PROC FREQ for 2x2 table of X1_high vs. diabetes */
```

```
PROC FREQ DATA=work.quiz1;
```

```
  TABLES X1_high * diabetes / CHISQ NOROW NOCOL NOPERCENT;
```

```
RUN;
```