```
DATA phbirths;
INFILE '/home/u58684395/Assignment 2/phbirths.txt';
INPUT Case Black$ Edu Smoke$ GAge Weight;
BlackB=0;
SmokeB=0;
IF Black="TRUE" THEN BlackB=1;
IF Smoke="TRUE" THEN SmokeB=1;
RUN;
/*Q2a*/
PROC SORT DATA=phbirths;
    BY SmokeB;
RUN;

PROC UNIVARIATE DATA=phbirths;
    VAR Weight;
RUN;
/*Q2b*/
PROC BOXPLOT DATA=phbirths;
    PLOT Weight*SmokeB;
RUN;
/*Q2c*/
PROC REG DATA=phbirths PLOTS=none;
    MODEL Weight=SmokeB;
    MODEL Weight=GAge; /*SmokeB is statistically significant i.e. is a risk factor of Weight*/
    MODEL SmokeB=GAge; /*smokeB is associated with GAge but is smoking a direct consequence of GAge? */
RUN;
/*Q2d*/
DATA phbirths1;
    SET phbirths;
    SmokeBbyBlackB = SmokeB*BlackB;
RUN;
PROC REG DATA=phbirths1 PLOTS=none;
    MODEL Weight= SmokeB BlackB SmokeBbyBlackB;
RUN;
```