```sas
/* Creating the dataset */
data SYC_DAT;
    infile "/home/u63735492/Assignment3STAT854/syc.txt" dlm=',' firstobs=2;
    input stratum psu psusize initwt finalwt randgrp age race ethnicty educ sex livewith famtime crimtype
        everviol numarr probtn corrinst evertime prviol prprop prdrug prpub prjuv agefirst usewepn alcuse
        everdrug;
    /* Convert missing values to SAS missing values */
    if age = 99 then age = .;
    if race = 9 then race = .;
    if sex = 9 then sex = .;
    if numarr = 99 then numarr = .;
    if prviol = 9 then prviol = .;
    if everdrug = 9 then everdrug = .;


    /* Exclude observations with missing values for the analysis */
    if cmiss(age, numarr, prviol, everdrug) = 0;
run;

/* Formatting the values */
proc format;
    value prviol_form 1 = "yes" 0 = "no";
    value everdrug_form 1 = "yes" 0 = "no";
    value sex_form 1 = "male" 2 = female;
run;

/* Adding them to the dataset */

data SYC_DAT;
    set SYC_DAT;
    format prviol prviol_form.
           everdrug everdrug_form.
           sex sex_form.
run;

/* reading in the weights */
proc import out=WEIGHTS
    datafile="/home/u63735492/FinalProjectSTAT854/weight_matrix.csv"
    dbms=csv
    replace;
    getnames=yes;
RUN;

/* drop the ID column as it is no longer necessary */
data WEIGHTS;
    set WEIGHTS;
    drop ID;
run;

DATA SYC_FINAL;
  MERGE SYC_DAT WEIGHTS;
RUN;

/* part a) - estimate average age of youth in custody */
proc surveymeans mean var clm total = 23655 data = SYC_FINAL varmethod=bootstrap;
    var age;
    strata stratum;
    weight finalwt;
    repweights w1-w100;
run;

/* part b) - estimate average # of prior arrests */
proc surveymeans mean var clm total = 23655 data = SYC_FINAL varmethod = bootstrap;
    var numarr;
    strata stratum;
    weight finalwt;
    repweights w1-w100;
run;

/* part c) - proportion that have used illegal drugs */
proc surveyfreq total = 23655 data = SYC_FINAL varmethod=bootstrap;
    tables everdrug / nowt var cl;
    strata stratum;
    weight finalwt;
    repweights w1-w100;
run;
```

```sas
/* part d) - proportion that have been previously arrested */
proc surveyfreq total = 23655 data = SYC_FINAL varmethod=bootstrap;
    tables prviol/ nowt var cl;
    strata stratum;
    weight finalwt;
    repweights w1-w100;
run;

/* part e) - have used illegal drugs and been previously arrested for a  violent crime */
proc surveyfreq total = 23655 data = SYC_FINAL varmethod=bootstrap;
    tables everdrug / nowt var cl;
    strata stratum;
    weight finalwt;
    repweights w1-w100;
    where prviol = 1;
run;

/* part f) - est. proportion of males */
proc surveyfreq total = 23655 data = SYC_FINAL varmethod=bootstrap;
    tables sex / nowt var cl;
    strata stratum;
    weight finalwt;
    repweights w1-w100;
run;

/* part g) - est. proportion of african americans */
proc surveyfreq total = 23655 data = SYC_FINAL varmethod=bootstrap;
    tables race / nowt var cl;
    strata stratum;
    weight finalwt;
    repweights w1-w100;
run;

/* part g) - est. proportion of african american males */
proc surveyfreq total = 23655 data = SYC_FINAL varmethod=bootstrap;
    tables race / nowt var cl;
    strata stratum;
    weight finalwt;
    repweights w1-w100;
    where sex = 1;
run;
```