

```

/* load data */
DATA data;
    INFILE "/home/u63563888/435/homework4/myeloma.dat";
    INPUT patient_num survival_time status age
           sex Bun Ca Hb Pcells Protein;

    /* convert sex values (1 and 2) to is_male */
    IF sex = 1 THEN is_male = 1;
    ELSE is_male = 0;

    DROP patient_num sex;
RUN;

/* forward selection */
PROC PHREG DATA = data;
    MODEL survival_time * status(0) =
           age is_male Bun Ca Hb Pcells Protein
           / SELECTION = FORWARD;
RUN;

/* backward selection */
PROC PHREG DATA = data;
    MODEL survival_time * status(0) =
           age is_male Bun Ca Hb Pcells Protein
           / SELECTION = BACKWARD;
RUN;

/* stepwise selection */
PROC PHREG DATA = data;
    MODEL survival_time * status(0) =
           age is_male Bun Ca Hb Pcells Protein
           / SELECTION = STEPWISE;
RUN;

```