

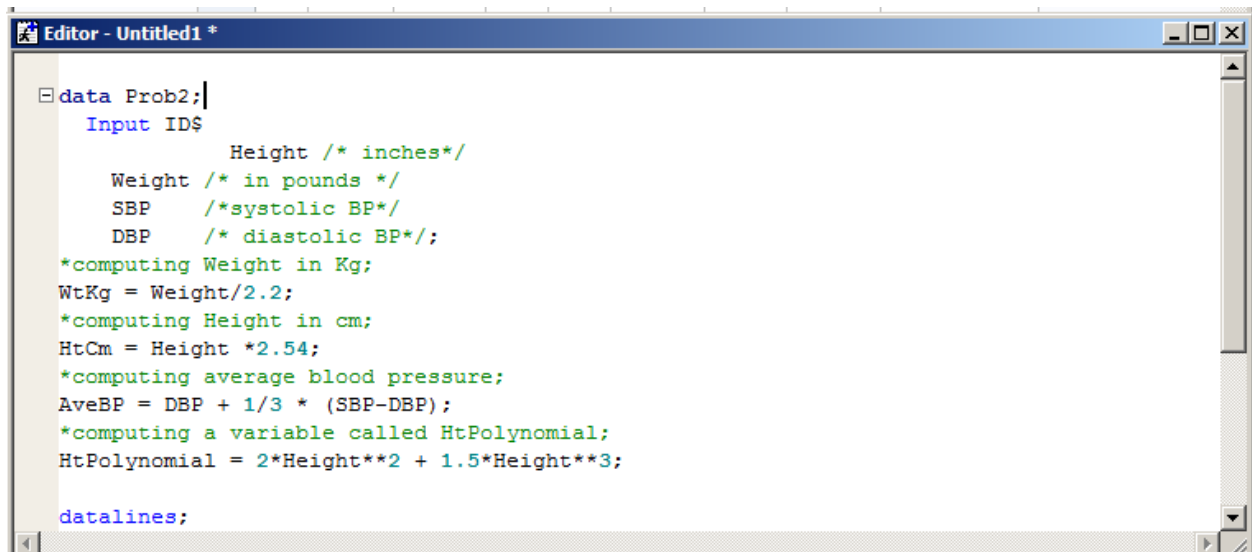
Lab 1 - Solution

Please provide a program file, a log file and an output file for this Lab

Given the program below, add the necessary statements and modifications to compute four new variables:

- a- Weight in Kilograms (1 kg = 2.2 pounds). Name this variable WtKg.
- b- Height in centimeters (1 inch = 2.54 cm). Name this variable HtCm.
- c- Average blood pressure (call it AveBP) equal to the diastolic blood pressure plus one-third the difference of the systolic blood pressure minus the diastolic blood pressure.
- d- A variable (call it HtPolynomial) equal to 2 times the height squared plus 1.5 times the height cubed.

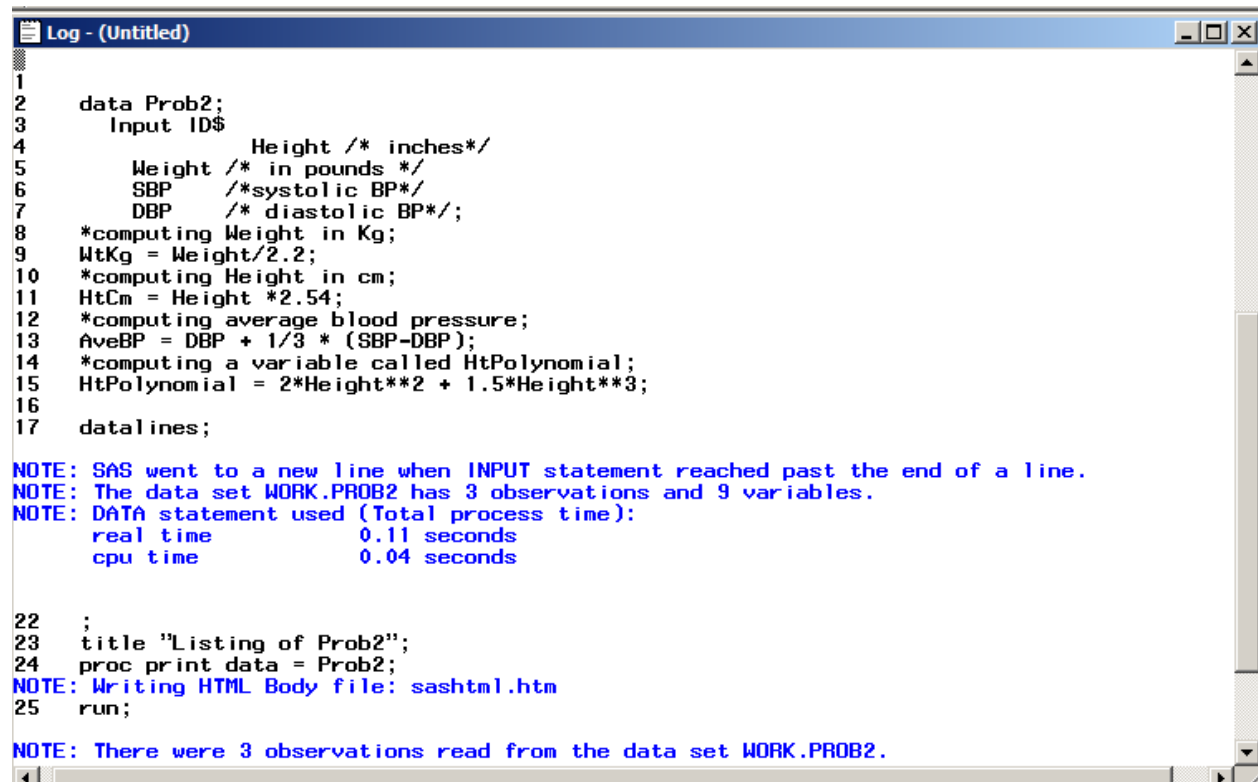
Program file:



```
data Prob2;
  input ID$
         Height /* inches*/
         Weight /* in pounds */
         SBP    /*systolic BP*/
         DBP    /* diastolic BP*/;
  *computing Weight in Kg;
  WtKg = Weight/2.2;
  *computing Height in cm;
  HtCm = Height *2.54;
  *computing average blood pressure;
  AveBP = DBP + 1/3 * (SBP-DBP);
  *computing a variable called HtPolynomial;
  HtPolynomial = 2*Height**2 + 1.5*Height**3;

  datalines;
```

Log File:



```
1
2 data Prob2;
3   input ID$
4         Height /* inches*/
5         Weight /* in pounds */
6         SBP /*systolic BP*/
7         DBP /* diastolic BP*/;
8   *computing Weight in Kg;
9   WtKg = Weight/2.2;
10  *computing Height in cm;
11  HtCm = Height *2.54;
12  *computing average blood pressure;
13  AveBP = DBP + 1/3 * (SBP-DBP);
14  *computing a variable called HtPolynomial;
15  HtPolynomial = 2*Height**2 + 1.5*Height**3;
16
17  datalines;

NOTE: SAS went to a new line when INPUT statement reached past the end of a line.
NOTE: The data set WORK.PROB2 has 3 observations and 9 variables.
NOTE: DATA statement used (Total process time):
      real time           0.11 seconds
      cpu time            0.04 seconds

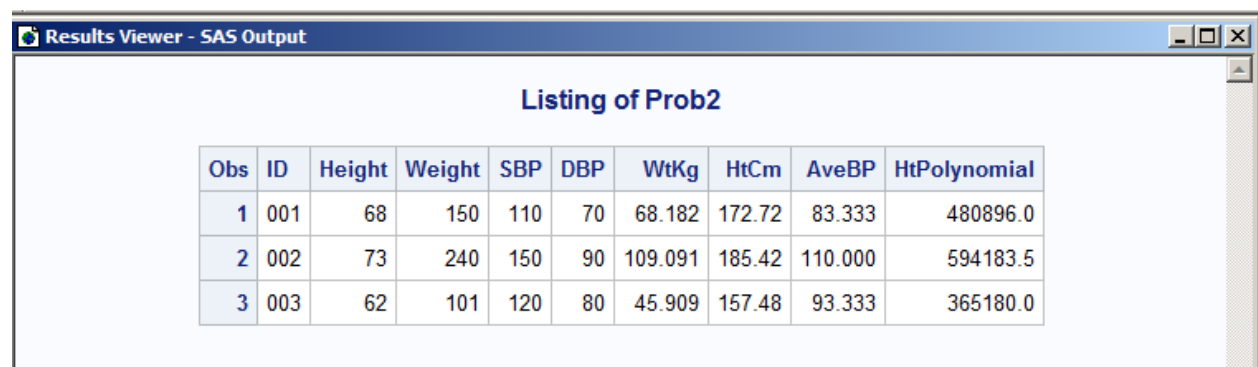
22 ;
23 title "Listing of Prob2";
24 proc print data = Prob2;
NOTE: Writing HTML Body file: sashtml.htm
25 run;

NOTE: There were 3 observations read from the data set WORK.PROB2.
```



```
NOTE: There were 3 observations read from the data set WORK.PROB2.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.59 seconds
      cpu time            0.24 seconds
```

Output file:



Obs	ID	Height	Weight	SBP	DBP	WtKg	HtCm	AveBP	HtPolynomial
1	001	68	150	110	70	68.182	172.72	83.333	480896.0
2	002	73	240	150	90	109.091	185.42	110.000	594183.5
3	003	62	101	120	80	45.909	157.48	93.333	365180.0