In the pop-up window, paste and run the following SAS macro that is tailored for this specific problem. The macro can be modified with little effort for similar situations.

```sas
Data Cap1_NN_Pr (KEEP = P_SATISF1UNSAT Target);
  Set &EM_Import_Score;
  If SATISF1 = 'UNSAT' then Target = 1; else Target = 0;
Run;
%macro cutoff100;
  %do
    n = 1% to 100;
    Data Cap1_NN_Pred_&n. ;
      set Cap1_NN_Pr;
      Cutoff = &n/100;
      If P_SATISF1UNSAT > Cutoff then D_target=1; else D_target=0;
      If D_target=1 and Target=1 then Tr_Positive=1;
      ELSE Tr_Positive=0;
      If D_target=1 and Target=0 then F_Positive=1; ELSE F_Positive=0;
    run;
    proc means data=Cap1_NN_Pred_&n. noprint;
      by cutoff;
      var Tr_Positive F_Positive;
      output out=Cap1_NN_Pred_&n._sum(drop=_type_ _freq_) sum=Tr_Positive_sum F_Positive_sum;
    run;
    proc append base=all data=Cap1_NN_Pred_&n._sum; run;
  %end;
%mend cutoff100;
%cutoff100;
data Cap1_NN_all;
  set all;
  Pred_Pos = Tr_Positive_sum + F_Positive_sum;
  Total_Profit=278.52*.25*Tr_Positive_sum-15*Pred_Pos;
  Average_Profit = Total_Profit/Pred_Pos;
Run;
Proc print;
```

After the codes are executed, click on OK and then click on Run, Results, as shown in Figure D.35, to view the results. A new window appears with the results shown in Figure D.36.

So the best Total Profit is $17,660.25 when Cutoff = 0.21, while the best Average Profit is $17.2039 when Cutoff = 0.55, which is consistent with the earlier result in item 9 in “A Primer of SAS-EM Predictive Modeling.”

III. TUTORIALS—STEP-BY-STEP CASE STUDIES