# Hw 11

# Ting Hu

/\* 1 \*/  
data work.future\_costs(drop=i);  
 year=year(today());  
 wages=12874000;  
 retire=1765000;  
 medicine=649000;  
  
 do i=1 to 10;  
 year=year+1;  
 wages=wages\*1.03;  
 retire=retire\*1.014;  
 medicine=medicine\*1.095;  
 total\_costs=sum(wages, retire, medicine);  
 output;  
 end;  
 format wages retire medicine total\_costs dollar14.2;  
run;  
  
proc print data=work.future\_costs;run;  
  
data work.future\_costs(drop=i) replace;  
 year=year(today());  
 wages=12874000;  
 retire=1765000;  
 medicine=649000;  
 income=50000000;  
  
 do i=1 to 100 until (total\_costs>income);  
 year=year+1;  
 wages=wages\*1.03;  
 retire=retire\*1.014;  
 medicine=medicine\*1.095;  
 total\_costs=sum(wages, retire, medicine);  
 income=income\*1.01;  
 output;  
 end;  
 format wages retire medicine total\_costs income dollar14.2;  
run;  
  
proc print data=work.future\_costs;run;  
   
/\* 2 \*/  
data work.expenses;  
 income=50000000;  
 expenses=38750000;  
 do year=1 to 100 until (expenses>income or year>30);  
 income=income\*1.01;  
 expenses=expenses\*1.02;  
 output;  
 end;  
run;  
  
proc print data=work.expenses;  
 format income expenses dollar14.2;  
run;  
  
/\* 3 \*/  
data work.income;  
 income=50000000;  
 expenses=38750000;  
 do year=1 to 75;  
 income=income\*1.01;  
 expenses=expenses\*1.02;  
 if expenses>income then  
 leave;  
 output;  
 end;  
run;  
  
proc print data=work.income;  
 format income expenses dollar14.2;  
run;  
  
libname hw11'/courses/d649d56dba27fe300/STA5066';  
  
/\* 4 \*/  
proc contents data=hw11.orders\_midyear;run;  
  
proc print data=hw11.orders\_midyear;run;  
  
data discount\_sales(drop=i);  
 set hw11.orders\_midyear;  
 array Mon{6} Month1-Month6;  
 do i=1 to 6;  
 Mon{i}=Mon{i}\*0.95;  
 end;  
run;  
proc print data=discount\_sales;  
 format Month1-Month6 dollar8.2;  
run;  
  
/\* 5 \*/  
data special\_offer;  
 set hw11.orders\_midyear;  
 Total\_Sales=sum(of Month1-Month6);  
 array Mon{3} Month1-Month3;  
 do i=1 to 3;  
 Mon{i}=Mon{i}\*0.9;  
 Projected\_Sales=sum(of Month1-Month6);  
 Difference=Total\_Sales-Projected\_Sales;  
 end;  
 keep Total\_Sales Projected\_Sales Difference;  
run;  
  
proc print data=special\_offer ;  
 sum Difference;  
 format Total\_Sales Projected\_Sales Difference dollar8.2;  
run;  
  
/\* 6 \*/  
data preferred\_cust;  
 set hw11.orders\_midyear;  
 array Mon{6} Month1-Month6;  
 array Target{6} \_temporary\_ (200, 400, 300, 100, 100, 200);  
 Over1=Mon{1}-Target{1};  
 Over2=Mon{2}-Target{2};  
 Over3=Mon{3}-Target{3};  
 Over4=Mon{4}-Target{4};  
 Over5=Mon{5}-Target{5};  
 Over6=Mon{6}-Target{6};  
 array Over{6} Over1-Over6;  
 Total\_Over=0;  
  
 do i=1 to 6;  
 if Over{i}>0 then  
 Total\_Over=Total\_Over+Over{i};  
 end;  
 if Total\_Over>500 then  
 output;  
 keep Customer\_ID Over1 Over2 Over3 Over4 Over5 Over6 Total\_Over;  
run;  
  
proc print data=preferred\_cust;  
 format Over1 Over2 Over3 Over4 Over5 Over6 Total\_Over dollar8.2;  
run;  
  
/\* 7 \*/  
proc print data=hw11.test\_answers;run;  
  
data passed failed;  
 set hw11.test\_answers;  
 array Question{10} Q1-Q10;  
 array Answer{10} $ \_temporary\_ ("A", "C", "C", "B", "E", "E", "D", "B", "B", "A");  
 Score=0;  
 do i=1 to 10;  
 if Question{i}=Answer{i} then  
 Score=Score+1;  
 end;  
 if Score>=7 then  
 output passed;  
 else  
 output failed;  
 drop i;  
run;  
  
proc print data=passed;run;  
  
proc print data=failed;run;  
  
/\* 8 \*/  
proc means data=hw11.labsubset;run;  
  
data work.examsub2(drop=i);  
 set hw11.labsubset;  
 array variable{10} HGP HTP TCP TGP LCP HDP FBPSI CRP SGP URP;  
 array unknown{5} \_temporary\_ (8, 88, 888, 8888, 88888);  
 do i=1 to 10;  
 if variable{i}=unknown{1} or variable{i}=unknown{2}   
 or variable{i}=unknown{3} or variable{i}=unknown{4}   
 or variable{i}=unknown{5} then variable{i}=.;  
 end;  
run;  
  
proc means data=work.examsub2;run;