```sas
*DESICION MAKING;
/*
Decision making structures require the programmer to specify one or more conditions
to be evaluated or tested by the program, along with a statement or statements to be
executed if the condition is determined to be true, and optionally,
other statements to be executed if the condition is determined to be false.
*/

*IF statement;
* Syntax: IF (condition);
data sample_db;
    input x1 x2 x3;
    datalines;
    1 3 4
    23 2 43
    2 3 23
    2 32 43
    ;

Data sample2;
set sample_db;
if x3 > 5;
proc print data=sample2;
run;

*IF-THEN-ELSE;
/*
IF (condition ) THEN result1;
ELSE result2;
*/
DATA EMPDAT;
INPUT   EMPID ENAME $ SALARY DEPT $ DOJ DATE9.;
LABEL ID = 'Employee ID';
FORMAT DOJ DATE9.;
DATALINES;
1 Rick 623.3 IT 02APR2001
2 Dan 515.2 OPS 11JUL2012
3 Mike 611.5 IT 21OCT2000
4 Ryan 729.1 HR 30JUL2012
5 Gary 843.2 FIN 06AUG2000
6 Tusar 578.6 IT 01MAR2009
7 Pranab 632.8 OPS 16AUG1998
8 Rasmi 722.5 FIN 13SEP2014
;
Data EMPDAT1;
Set EMPDAT;
IF SALARY > 650 THEN SALRANGE ="HIGH";
ELSE SALRANGE = "LOW";
PROC PRINT DATA = EMPDAT1;
run;


*IF-THEN-ELSE-IF;
/*
IF (condition1) THEN result1;
ELSE IF (condition2) THEN result2;
ELSE IF (condition3) THEN result3;
*/

DATA EMPDAT;
INPUT   EMPID ENAME $ SALARY DEPT $ DOJ DATE9.;
LABEL ID = 'Employee ID';
FORMAT DOJ DATE9.;
DATALINES;
1 Rick 623.3 IT 02APR2001
2 Dan 515.2 OPS 11JUL2012
3 Mike 611.5 IT 21OCT2000
```

```
4 Ryan 729.1 HR 30JUL2012
5 Gary 843.2 FIN 06AUG2000
6 Tusar 578.6 IT 01MAR2009
7 Pranab 632.8 OPS 16AUG1998
8 Rasmi 722.5 FIN 13SEP2014
;
Data EMPDAT1;
Set EMPDAT;
IF SALARY < 600 THEN SALRANGE = "LOW";
ELSE IF 600 <= SALARY <= 700 THEN SALRANGE = "MEDIUM";
ELSE IF 700 < SALARY THEN SALRANGE = "HIGH";
PROC PRINT DATA = EMPDAT1;
run;

*IF-THEN-DELETE;
*Syntax: IF (condition ) THEN DELETE;

DATA EMPDAT;
INPUT   EMPID ENAME $ SALARY DEPT $ DOJ DATE9.;
LABEL ID = 'Employee ID';
FORMAT DOJ DATE9.;
DATALINES;
1 Rick 623.3 IT 02APR2001
2 Dan 515.2 OPS 11JUL2012
3 Mike 611.5 IT 21OCT2000
4 Ryan 729.1 HR 30JUL2012
5 Gary 843.2 FIN 06AUG2000
6 Tusar 578.6 IT 01MAR2009
7 Pranab 632.8 OPS 16AUG1998
8 Rasmi 722.5 FIN 13SEP2014
;
Data EMPDAT1;
Set EMPDAT;
IF SALARY > 700 THEN DELETE;
PROC PRINT DATA = EMPDAT1;
run;
```