```
 *Completely Fixed (regular regression).
MIXED Y WITH X
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.0000000000
01) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED= X | SSTYPE(3)
  /METHOD=REML
  /PRINT=G  R SOLUTION
  /SAVE=PRED RESID.
```

Mixed Model Analysis

Model Dimension[a]

		Number of Levels	Number of Parameters
Fixed Effects	Intercept	1	1
	X	1	1
Residual			1
Total		2	3

a. Dependent Variable: Y.

Information Criteria[a]

-2 Restricted Log Likelihood	568,714
Akaike's Information Criterion (AIC)	570,714
Hurvich and Tsai's Criterion (AICC)	570,758
Bozdogan's Criterion (CAIC)	574,258
Schwarz's Bayesian Criterion (BIC)	573,258

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Y.

Fixed Effects

Type III Tests of Fixed Effects[a]

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	94	2,075	,153
X	1	94	785,046	,000

a. Dependent Variable: Y.

Estimates of Fixed Effects[a]

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	-1,453176	1,008859	94	-1,440	,153	-3,456288
X	3,764699	,134364	94	28,019	,000	3,497917

Estimates of Fixed Effects[a]

Parameter	95% Confidence Upper Bound
Intercept	,549936
X	4,031482

a. Dependent Variable: Y.

Covariance Parameters

Estimates of Covariance Parameters[a]

Parameter	Estimate	Std. Error
Residual	21,936667	3,199792

a. Dependent Variable: Y.

Residual Covariance (R) Matrix[a]

	Residual
Residual	21,936667

a. Dependent Variable: Y.

```
 *Random Slope.
MIXED Y WITH X
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.0000000000
```

```
01) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED= X | SSTYPE(3)
  /METHOD=REML
  /PRINT=G  R SOLUTION
  /RANDOM= X | SUBJECT(Unit) COVTYPE(VC)
  /SAVE=PRED RESID.
```

Mixed Model Analysis

Model Dimension[a]

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	X	1		1	
Random Effects	X[b]	1	Variance Components	1	Unit
Residual				1	
Total		3		4	

a. Dependent Variable: Y.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

Information Criteria[a]

-2 Restricted Log Likelihood	545,484
Akaike's Information Criterion (AIC)	549,484
Hurvich and Tsai's Criterion (AICC)	549,616
Bozdogan's Criterion (CAIC)	556,571
Schwarz's Bayesian Criterion (BIC)	554,571

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Y.

Fixed Effects

Type III Tests of Fixed Effects[a]

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	93,534	61,195	,000
X	1	9,662	1,147	,310

a. Dependent Variable: Y.

Estimates of Fixed Effects[a]

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	10,762550	1,375801	93,534	7,823	,000	8,030687
X	,847657	,791398	9,662	1,071	,310	-,924083

Estimates of Fixed Effects[a]

Parameter	95% Confidence Upper Bound
Intercept	13,494413
X	2,619396

a. Dependent Variable: Y.

Covariance Parameters

Estimates of Covariance Parameters[a]

Parameter		Estimate	Std. Error
Residual		9,604558	1,534272
X [subject = Unit]	Variance	6,369808	3,354873

a. Dependent Variable: Y.

Random Effect Covariance Structure (G)[a]

	X | Unit
X | Unit	6,369808

Variance Components

a. Dependent Variable: Y.

Residual Covariance (R) Matrix[a]

	Residual
Residual	9,604558

a. Dependent Variable: Y.

```
 *Random Interecept.
MIXED Y WITH X
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.0000000000
01) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED= X | SSTYPE(3)
  /METHOD=REML
  /PRINT=G  R SOLUTION
  /RANDOM=INTERCEPT | SUBJECT(Unit) COVTYPE(VC)
  /SAVE=PRED RESID.
```

Mixed Model Analysis

Model Dimension[a]

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	X	1		1	
Random Effects	Intercept[b]	1	Variance Components	1	Unit
Residual				1	
Total		3		4	

a. Dependent Variable: Y.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

Information Criteria[a]

-2 Restricted Log Likelihood	326,096
Akaike's Information Criterion (AIC)	330,096
Hurvich and Tsai's Criterion (AICC)	330,228
Bozdogan's Criterion (CAIC)	337,183
Schwarz's Bayesian Criterion (BIC)	335,183

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Y.

Fixed Effects

Type III Tests of Fixed Effects[a]

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	11,213	31,830	,000
X	1	83,528	121,858	,000

a. Dependent Variable: Y.

Estimates of Fixed Effects[a]

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	30,226295	5,357517	11,213	5,642	,000	18,461747
X	-1,026482	,092988	83,528	-11,039	,000	-1,211413

Estimates of Fixed Effects[a]

Parameter	95% Confidence Upper Bound
Intercept	41,990843
X	-,841551

a. Dependent Variable: Y.

Covariance Parameters

Estimates of Covariance Parameters[a]

Parameter		Estimate	Std. Error
Residual		,643972	,100008
Intercept [subject = Unit]	Variance	339,819112	145,459554

a. Dependent Variable: Y.

Random Effect Covariance Structure (G)[a]

	Intercept | Unit
Intercept | Unit	339,819112

Variance Components

a. Dependent Variable: Y.

Residual Covariance (R) Matrix[a]

	Residual
Residual	,643972

a. Dependent Variable: Y.

```
*Random Intercept and Slope (with correlation between Intercept and Slope).
MIXED Y WITH X
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.0000000000
01) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED= X | SSTYPE(3)
  /METHOD=REML
  /PRINT=G  R SOLUTION
  /RANDOM=INTERCEPT X | SUBJECT(Unit) COVTYPE(UN)
  /SAVE=PRED RESID.
```

Mixed Model Analysis

Model Dimension[a]

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	X	1		1	
Random Effects	Intercept + X[b]	2	Unstructured	3	Unit
Residual				1	
Total		4		6	

a. Dependent Variable: Y.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

Information Criteria[a]

-2 Restricted Log Likelihood	324,455
Akaike's Information Criterion (AIC)	332,455
Hurvich and Tsai's Criterion (AICC)	332,905
Bozdogan's Criterion (CAIC)	346,628
Schwarz's Bayesian Criterion (BIC)	342,628

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Y.

Fixed Effects

Type III Tests of Fixed Effects[a]

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	10,787	29,804	,000
X	1	9,541	91,913	,000

a. Dependent Variable: Y.

Estimates of Fixed Effects[a]

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	30,575670	5,600616	10,787	5,459	,000	18,218984
X	-1,015230	,105895	9,541	-9,587	,000	-1,252728

Estimates of Fixed Effects[a]

Parameter	95% Confidence Upper Bound
Intercept	42,932357
X	-,777731

a. Dependent Variable: Y.

Covariance Parameters

Estimates of Covariance Parameters[a]

Parameter		Estimate	Std. Error
Residual		,621327	,101295
Intercept + X [subject = Unit]	UN (1,1)	371,541687	162,099158
	UN (2,1)	-2,583342	2,521604
	UN (2,2)	,030629	,052893

a. Dependent Variable: Y.

Random Effect Covariance Structure (G)[a]

	Intercept | Unit	X | Unit
Intercept | Unit	371,541687	-2,583342
X | Unit	-2,583342	,030629

Unstructured

a. Dependent Variable: Y.

Residual Covariance (R) Matrix[a]

	Residual
Residual	,621327

a. Dependent Variable: Y.

```
*------------------------------------------------------------------------
-------------------------------------------------------
*Random Intercept and Slope (without correlation between Intercept and Slop
e).
MIXED Y WITH X
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.0000000000
01) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED= X | SSTYPE(3)
  /METHOD=REML
  /PRINT=G  R SOLUTION
  /RANDOM=INTERCEPT X | SUBJECT(Unit) COVTYPE(VC)
  /SAVE=PRED RESID.
```

Mixed Model Analysis

Model Dimension[a]

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	X	1		1	
Random Effects	Intercept + X[b]	2	Variance Components	2	Unit
Residual				1	
Total		4		5	

a. Dependent Variable: Y.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

Information Criteria[a]

-2 Restricted Log Likelihood	325,803
Akaike's Information Criterion (AIC)	331,803
Hurvich and Tsai's Criterion (AICC)	332,070
Bozdogan's Criterion (CAIC)	342,433
Schwarz's Bayesian Criterion (BIC)	339,433

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Y.

Fixed Effects

Type III Tests of Fixed Effects[a]

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	11,149	31,691	,000
X	1	8,836	93,223	,000

a. Dependent Variable: Y.

Estimates of Fixed Effects[a]

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	30,174019	5,360001	11,149	5,629	,000	18,395941
X	-1,012956	,104913	8,836	-9,655	,000	-1,250957

Estimates of Fixed Effects[a]

Parameter	95% Confidence Upper Bound
Intercept	41,952098
X	-,774954

a. Dependent Variable: Y.

Covariance Parameters

Estimates of Covariance Parameters[a]

Parameter		Estimate	Std. Error
Residual		,623804	,102667
Intercept [subject = Unit]	Variance	339,785852	146,009346
X [subject = Unit]	Variance	,025046	,053805

a. Dependent Variable: Y.

Random Effects Covariance Structures (G)

Intercept [subject = Unit][a]

	Intercept | Unit
Intercept | Unit	339,785852

Variance Components

a. Dependent Variable: Y.

X [subject = Unit][a]

	X | Unit
X | Unit	,025046

Variance Components

a. Dependent Variable: Y.

Residual Covariance (R) Matrix[a]

	Residual
Residual	,623804

a. Dependent Variable: Y.