

project 1 的 data 的 code book 标红文字代表该列没有出现的类别

**MS SubClass (Nominal):** Identifies the type of dwelling involved in the sale.

020	1-STORY 1946 & NEWER ALL STYLES
030	1-STORY 1945 & OLDER
040	1-STORY W/FINISHED ATTIC ALL AGES
045	1-1/2 STORY - UNFINISHED ALL AGES
050	1-1/2 STORY FINISHED ALL AGES
060	2-STORY 1946 & NEWER
070	2-STORY 1945 & OLDER
075	2-1/2 STORY ALL AGES
080	SPLIT OR MULTI-LEVEL
085	SPLIT FOYER
090	DUPLEX - ALL STYLES AND AGES
120	1-STORY PUD (Planned Unit Development) - 1946 & NEWER
150	1-1/2 STORY PUD - ALL AGES
160	2-STORY PUD - 1946 & NEWER
180	PUD - MULTILEVEL - INCL SPLIT LEV/FOYER
190	2 FAMILY CONVERSION - ALL STYLES AND AGES

**MS Zoning (Nominal):** Identifies the general zoning classification of the sale.

<b>A</b>	<b>Agriculture</b>
C	Commercial
FV	Floating Village Residential
<b>I</b>	<b>Industrial</b>
RH	Residential High Density
RL	Residential Low Density
<b>RP</b>	<b>Residential Low Density Park</b>
RM	Residential Medium Density

**Lot Frontage (Continuous):** Linear feet of street connected to property

**Lot Area (Continuous):** Lot size in square feet

**Street (Nominal):** Type of road access to property

Grvl	Gravel
Pave	Paved

**Alley (Nominal):** Type of alley access to property

Grvl	Gravel
Pave	Paved
NA	No alley access

**Lot Shape (Ordinal): General shape of property**

<b>Reg</b>	<b>Regular</b>
<b>IR1</b>	<b>Slightly irregular</b>
<b>IR2</b>	<b>Moderately Irregular</b>
<b>IR3</b>	<b>Irregular</b>

**Land Contour (Nominal): Flatness of the property**

<b>LvlNear</b>	<b>Flat/Level</b>
<b>Bnk</b>	<b>Banked - Quick and significant rise from street grade to building</b>
<b>HLS</b>	<b>Hillside - Significant slope from side to side</b>
<b>Low</b>	<b>Depression</b>

**Utilities (Ordinal): Type of utilities available**

<b>AllPub</b>	<b>All public Utilities (E,G,W,&amp; S)</b>
<b>NoSewr</b>	<b>Electricity, Gas, and Water (Septic Tank)</b>
<b>NoSeWa</b>	<b>Electricity and Gas Only</b>
<b>ELO</b>	<b>Electricity only</b>

**Lot Config (Nominal): Lot configuration**

<b>Inside</b>	<b>Inside lot</b>
<b>Corner</b>	<b>Corner lot</b>
<b>CulDSac</b>	<b>Cul-de-sac</b>
<b>FR2</b>	<b>Frontage on 2 sides of property</b>
<b>FR3</b>	<b>Frontage on 3 sides of property</b>

**Land Slope (Ordinal): Slope of property**

<b>Gtl</b>	<b>Gentle slope</b>
<b>Mod</b>	<b>Moderate Slope</b>
<b>Sev</b>	<b>Severe Slope</b>

**Neighborhood (Nominal): Physical locations within Ames city limits (map available)**

<b>Blmngtn</b>	<b>Bloomington Heights</b>
<b>Blueste</b>	<b>Bluestem</b>
<b>BrDale</b>	<b>Briardale</b>
<b>BrkSide</b>	<b>Brookside</b>
<b>ClearCr</b>	<b>Clear Creek</b>
<b>CollgCr</b>	<b>College Creek</b>
<b>Crawfor</b>	<b>Crawford</b>
<b>Edwards</b>	<b>Edwards</b>
<b>Gilbert</b>	<b>Gilbert</b>

<b>Greens</b>	<b>Greens</b>
<b>GrnHill</b>	<b>Green Hills</b>
<b>IDOTRR</b>	<b>Iowa DOT and Rail Road</b>
<b>Landmrk</b>	<b>Landmark</b>
<b>MeadowV</b>	<b>Meadow Village</b>
<b>Mitchel</b>	<b>Mitchell</b>
<b>Names</b>	<b>North Ames</b>
<b>NoRidge</b>	<b>Northridge</b>
<b>NPkVill</b>	<b>Northpark Villa</b>
<b>NridgHt</b>	<b>Northridge Heights</b>
<b>NWAmes</b>	<b>Northwest Ames</b>
<b>OldTown</b>	<b>Old Town</b>
<b>SWISU</b>	<b>South &amp; West of Iowa State University</b>
<b>Sawyer</b>	<b>Sawyer</b>
<b>SawyerW</b>	<b>Sawyer West</b>
<b>Somerst</b>	<b>Somerset</b>
<b>StoneBr</b>	<b>Stone Brook</b>
<b>Timber</b>	<b>Timberland</b>
<b>Veenker</b>	<b>Veenker</b>

**Condition 1 (Nominal): Proximity to various conditions**

<b>Artery</b>	<b>Adjacent to arterial street</b>
<b>Feedr</b>	<b>Adjacent to feeder street</b>
<b>Norm</b>	<b>Normal</b>
<b>RRNn</b>	<b>Within 200' of North-South Railroad</b>
<b>RRAn</b>	<b>Adjacent to North-South Railroad</b>
<b>PosN</b>	<b>Near positive off-site feature--park, greenbelt, etc.</b>
<b>PosA</b>	<b>Adjacent to postive off-site feature</b>
<b>RRNe</b>	<b>Within 200' of East-West Railroad</b>
<b>RR Ae</b>	<b>Adjacent to East-West Railroad</b>

**Condition 2 (Nominal): Proximity to various conditions (if more than one is present)**

<b>Artery</b>	<b>Adjacent to arterial street</b>
<b>Feedr</b>	<b>Adjacent to feeder street</b>
<b>Norm</b>	<b>Normal</b>
<b>RRNn</b>	<b>Within 200' of North-South Railroad</b>
<b>RRAn</b>	<b>Adjacent to North-South Railroad</b>
<b>PosN</b>	<b>Near positive off-site feature--park, greenbelt, etc.</b>
<b>PosA</b>	<b>Adjacent to postive off-site feature</b>
<b>RRNe</b>	<b>Within 200' of East-West Railroad</b>
<b>RR Ae</b>	<b>Adjacent to East-West Railroad</b>

**Bldg Type (Nominal): Type of dwelling**

<b>1Fam</b>	<b>Single-family Detached</b>
<b>2FmCon</b>	<b>Two-family Conversion; originally built as one-family dwelling</b>
<b>Duplx</b>	<b>Duplex</b>
<b>TwnhsE</b>	<b>Townhouse End Unit</b>
<b>TwnhsI</b>	<b>Townhouse Inside Unit</b>

**House Style (Nominal): Style of dwelling**

<b>1Story</b>	<b>One story</b>
<b>1.5Fin</b>	<b>One and one-half story: 2nd level finished</b>
<b>1.5Unf</b>	<b>One and one-half story: 2nd level unfinished</b>
<b>2Story</b>	<b>Two story</b>
<b>2.5Fin</b>	<b>Two and one-half story: 2nd level finished</b>
<b>2.5Unf</b>	<b>Two and one-half story: 2nd level unfinished</b>
<b>SFoyer</b>	<b>Split Foyer</b>
<b>SLvl</b>	<b>Split Level</b>

**Overall Qual (Ordinal): Rates the overall material and finish of the house**

<b>10</b>	<b>Very Excellent</b>
<b>9</b>	<b>Excellent</b>
<b>8</b>	<b>Very Good</b>
<b>7</b>	<b>Good</b>
<b>6</b>	<b>Above Average</b>
<b>5</b>	<b>Average</b>
<b>4</b>	<b>Below Average</b>
<b>3</b>	<b>Fair</b>
<b>2</b>	<b>Poor</b>
<b>1</b>	<b>Very Poor</b>

**Overall Cond (Ordinal): Rates the overall condition of the house**

<b>10</b>	<b>Very Excellent</b>
<b>9</b>	<b>Excellent</b>
<b>8</b>	<b>Very Good</b>
<b>7</b>	<b>Good</b>
<b>6</b>	<b>Above Average</b>
<b>5</b>	<b>Average</b>
<b>4</b>	<b>Below Average</b>
<b>3</b>	<b>Fair</b>
<b>2</b>	<b>Poor</b>
<b>1</b>	<b>Very Poor</b>

**Year Built (Discrete): Original construction date**

**Year Remod/Add (Discrete): Remodel date (same as construction date if no remodeling or**

additions)

**Roof Style (Nominal): Type of roof**

Flat	Flat
Gable	Gable
Gambrel	Gabrel (Barn)
Hip	Hip
Mansard	Mansard
Shed	Shed

**Roof Matl (Nominal): Roof material**

ClyTile	Clay or Tile
CompShg	Standard (Composite) Shingle
Membran	Membrane
Metal	Metal
Roll	Roll
Tar&Grv	Gravel & Tar
WdShake	Wood Shakes
WdShngl	Wood Shingles

**Exterior 1 (Nominal): Exterior covering on house**

AsbShng	Asbestos Shingles
AsphShn	Asphalt Shingles
BrkComm	Brick Common
BrkFace	Brick Face
CBlock	Cinder Block
CemntBd	Cement Board
HdBoard	Hard Board
ImStucc	Imitation Stucco
MetalSd	Metal Siding
Other	Other
Plywood	Plywood
PreCast	PreCast
Stone	Stone
Stucco	Stucco
VinylSd	Vinyl Siding
Wd Sdng	Wood Siding
WdShing	Wood Shingles

**Exterior 2 (Nominal): Exterior covering on house (if more than one material)**

AsbShng	Asbestos Shingles
AsphShn	Asphalt Shingles

BrkComm	Brick Common
BrkFace	Brick Face
CBlock	Cinder Block
CemntBd	Cement Board
HdBoard	Hard Board
ImStucc	Imitation Stucco
MetalSd	Metal Siding
Other	Other
Plywood	Plywood
PreCast	PreCast
Stone	Stone
Stucco	Stucco
VinylSd	Vinyl Siding
Wd Sdng	Wood Siding
WdShing	Wood Shingles

**Mas Vnr Type (Nominal): Masonry veneer type**

BrkCmn	Brick Common
BrkFace	Brick Face
CBlock	Cinder Block
None	None
Stone	Stone

**Mas Vnr Area (Continuous): Masonry veneer area in square feet**

**Exter Qual (Ordinal): Evaluates the quality of the material on the exterior**

Ex	Excellent
Gd	Good
TA	Average/Typical
Fa	Fair
Po	Poor

**Exter Cond (Ordinal): Evaluates the present condition of the material on the exterior**

Ex	Excellent
Gd	Good
TA	Average/Typical
Fa	Fair
Po	Poor

**Foundation (Nominal): Type of foundation**

BrkTil	Brick & Tile
CBlock	Cinder Block

PConc	Poured Contrete
Slab	Slab
Stone	Stone
Wood	Wood

**Bsmt Qual (Ordinal): Evaluates the height of the basement**

Ex	Excellent (100+ inches)
Gd	Good (90-99 inches)
TA	Typical (80-89 inches)
Fa	Fair (70-79 inches)
Po	Poor (<70 inches)
NA	No Basement

**Bsmt Cond (Ordinal): Evaluates the general condition of the basement**

Ex	Excellent
Gd	Good
TA	Typical - slight dampness allowed
Fa	Fair - dampness or some cracking or settling
Po	Poor - Severe cracking, settling, or wetness
NA	No Basement

**Bsmt Exposure (Ordinal): Refers to walkout or garden level walls**

Gd	Good Exposure
Av	Average Exposure (split levels or foyers typically score average or above)
Mn	Minimum Exposure
No	No Exposure
NA	No Basement

**BsmtFin Type 1 (Ordinal): Rating of basement finished area**

GLQ	Good Living Quarters
ALQ	Average Living Quarters
BLQ	Below Average Living Quarters
Rec	Average Rec Room
LwQ	Low Quality
Unf	Unfinished
NA	No Basement

**BsmtFin SF 1 (Continuous): Type 1 finished square feet**

**BsmtFinType 2 (Ordinal): Rating of basement finished area (if multiple types)**

GLQ	Good Living Quarters
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ALQ	Average Living Quarters
BLQ	Below Average Living Quarters
Rec	Average Rec Room
LwQ	Low Quality
Unf	Unfinished
NA	No Basement

**BsmtFin SF 2 (Continuous):** Type 2 finished square feet

**Bsmt Unf SF (Continuous):** Unfinished square feet of basement area

**Total Bsmt SF (Continuous):** Total square feet of basement area

**Heating (Nominal):** Type of heating

<b>Floor</b>	<b>Floor Furnace</b>
GasA	Gas forced warm air furnace
GasW	Gas hot water or steam heat
Grav	Gravity furnace
<b>OthW</b>	<b>Hot water or steam heat other than gas</b>
Wall	Wall furnace

**HeatingQC (Ordinal):** Heating quality and condition

Ex	Excellent
Gd	Good
TA	Average/Typical
Fa	Fair
Po	Poor

**Central Air (Nominal):** Central air conditioning

N	No
Y	Yes

**Electrical (Ordinal):** Electrical system

SBrkr	Standard Circuit Breakers & Romex
FuseA	Fuse Box over 60 AMP and all Romex wiring (Average)
FuseF	60 AMP Fuse Box and mostly Romex wiring (Fair)
FuseP	60 AMP Fuse Box and mostly knob & tube wiring (poor)
<b>Mix</b>	<b>Mixed</b>

**1st Flr SF (Continuous):** First Floor square feet

**2nd Flr SF (Continuous) :** Second floor square feet



**Low Qual Fin SF (Continuous): Low quality finished square feet (all floors)**

**Gr Liv Area (Continuous): Above grade (ground) living area square feet**

**Bsmt Full Bath (Discrete): Basement full bathrooms**

**Bsmt Half Bath (Discrete): Basement half bathrooms**

**Full Bath (Discrete): Full bathrooms above grade**

**Half Bath (Discrete): Half baths above grade**

**Bedroom (Discrete): Bedrooms above grade (does NOT include basement bedrooms)**

**Kitchen (Discrete): Kitchens above grade**

**KitchenQual (Ordinal): Kitchen quality**

**Ex Excellent**

**Gd Good**

**TA Typical/Average**

**Fa Fair**

**Po Poor**

**TotRmsAbvGrd (Discrete): Total rooms above grade (does not include bathrooms)**

**Functional (Ordinal): Home functionality (Assume typical unless deductions are warranted)**

**Typ Typical Functionality**

**Min1 Minor Deductions 1**

**Min2 Minor Deductions 2**

**Mod Moderate Deductions**

**Maj1 Major Deductions 1**

**Maj2 Major Deductions 2**

**Sev Severely Damaged**

**Sal Salvage only**

**Fireplaces (Discrete): Number of fireplaces**

**FireplaceQu (Ordinal): Fireplace quality**

**Ex Excellent - Exceptional Masonry Fireplace**

**Gd Good - Masonry Fireplace in main level**

**TA Average - Prefabricated Fireplace in main living area or Masonry Fireplace in**

**basement**

**Fa Fair - Prefabricated Fireplace in basement**

**Po Poor - Ben Franklin Stove**

**NA No Fireplace**

**Garage Type (Nominal): Garage location**

**2Types More than one type of garage**

**Attchd Attached to home**

**Basment Basement Garage**

**BuiltIn Built-In (Garage part of house - typically has room above garage)**

**CarPort Car Port**

**Detchd Detached from home**

**NA No Garage**

**Garage Yr Blt (Discrete): Year garage was built**

**Garage Finish (Ordinal) : Interior finish of the garage**

**Fin Finished**

**RFn Rough Finished**

**Unf Unfinished**

**NA No Garage**

**Garage Cars (Discrete): Size of garage in car capacity**

**Garage Area (Continuous): Size of garage in square feet**

**Garage Qual (Ordinal): Garage quality**

**Ex Excellent**

**Gd Good**

**TA Typical/Average**

**Fa Fair**

**Po Poor**

**NA No Garage**

**Garage Cond (Ordinal): Garage condition**

**Ex Excellent**

**Gd Good**

**TA Typical/Average**

**Fa Fair**

**Po Poor**

**NA No Garage**

**Paved Drive (Ordinal): Paved driveway**

**Y** Paved  
**P** Partial Pavement  
**N** Dirt/Gravel

**Wood Deck SF (Continuous): Wood deck area in square feet**

**Open Porch SF (Continuous): Open porch area in square feet**

**Enclosed Porch (Continuous): Enclosed porch area in square feet**

**3-Ssn Porch (Continuous): Three season porch area in square feet**

**Screen Porch (Continuous): Screen porch area in square feet**

**Pool Area (Continuous): Pool area in square feet**

**Pool QC (Ordinal): Pool quality**

**Ex** Excellent  
**Gd** Good  
**TA** Average/Typical  
**Fa** Fair  
**NA** No Pool

**Fence (Ordinal): Fence quality**

**GdPrv** Good Privacy  
**MnPrv** Minimum Privacy  
**GdWo** Good Wood  
**MnWw** Minimum Wood/Wire  
**NA** No Fence

**Misc Feature (Nominal): Miscellaneous feature not covered in other categories**

**Elev** Elevator  
**Gar2** 2nd Garage (if not described in garage section)  
**Othr** Other  
**Shed** Shed (over 100 SF)  
**TenC** Tennis Court  
**NA** None

**Misc Val (Continuous): \$Value of miscellaneous feature**

**Mo Sold (Discrete): Month Sold (MM)**

**Yr Sold (Discrete): Year Sold (YYYY)**

**Sale Type (Nominal): Type of sale**

<b>WD</b>	<b>Warranty Deed - Conventional</b>
<b>CWD</b>	<b>Warranty Deed - Cash</b>
<b>VWD</b>	<b>Warranty Deed - VA Loan</b>
<b>New</b>	<b>Home just constructed and sold</b>
<b>COD</b>	<b>Court Officer Deed/Estate</b>
<b>Con</b>	<b>Contract 15% Down payment regular terms</b>
<b>ConLw</b>	<b>Contract Low Down payment and low interest</b>
<b>ConLI</b>	<b>Contract Low Interest</b>
<b>ConLD</b>	<b>Contract Low Down</b>
<b>Oth</b>	<b>Other</b>

**Sale Condition (Nominal): Condition of sale**

<b>Normal</b>	<b>Normal Sale</b>
<b>Abnorml</b>	<b>Abnormal Sale - trade, foreclosure, short sale</b>
<b>AdjLand</b>	<b>Adjoining Land Purchase</b>
<b>Alloca</b>	<b>Allocation - two linked properties with separate deeds, typically condo with a garage unit</b>
<b>Family</b>	<b>Sale between family members</b>
<b>Partial</b>	<b>Home was not completed when last assessed (associated with New Homes)</b>

**SalePrice (Continuous): Sale price \$\$**