```
<html><head></head><body># train.csv
and test.csv
price doc: sale price (this is the target variable)
id: transaction id
timestamp: date of transaction
full sq: total area in square meters, including loggias, balconies and other non-residential
areas
life sq: living area in square meters, excluding loggias, balconies and other non-residential
areas
floor: for apartments, floor of the building
max floor: number of floors in the building
material: wall material
build_year: year built
num room: number of living rooms
kitch sq: kitchen area
state: apartment condition
product type: owner-occupier purchase or investment
sub_area: name of the district
The dataset also includes a collection of features about each property's surrounding
neighbourhood, and some features that are constant across each sub area (known as a Raion). Most
of the feature names are self explanatory, with the following notes. See below for a complete
list.
full all: subarea population
male f, female f: subarea population by gender
young *: population younger than working age
work *: working-age population
ekder *: retirement-age population
n m {all | male | female }: population between n and m years old
build count *: buildings in the subarea by construction type or year
x count 500: the number of x within 500m of the property
x part 500: the share of x within 500m of the property
sqm : square meters
cafe count d price p: number of cafes within d meters of the property that have an average bill
under p RUB
trc : shopping malls
prom : industrial zones
green_: green zones
metro : subway
avto: distances by car
mkad : Moscow Circle Auto Road
ttk: Third Transport Ring
sadovoe : Garden Ring
bulvar_ring_: Boulevard Ring
kremlin : City center
zd_vokzaly_: Train station
oil_chemistry_: Dirty industry
ts_: Power plant
# macro.csv
A set of macroeconomic indicators, one for each date.
timestamp: Transaction timestamp
oil urals: Crude Oil Urals ($/bbl)
gdp quart: GDP
gdp_quart_growth: Real GDP growth
cpi: Inflation - Consumer Price Index Growth
ppi: Inflation - Producer Price index Growth
gdp deflator: Inflation - GDP deflator
balance trade: Trade surplus
balance trade growth: Trade balance (as a percentage of previous year)
usdrub: Ruble/USD exchange rate
eurrub: Ruble/EUR exchange rate
brent: London Brent ($/bbl)
net capital export: Net import / export of capital
gdp annual: GDP at current prices
```

```
gdp_annual_growth: GDP growth (in real terms)
average provision of build contract: Provision by orders in Russia (for the developer)
average provision of build contract moscow: Provision by orders in Moscow (for the developer)
rts: Index RTS / return
micex: MICEX index / return
micex rgbi tr: MICEX index for government bonds (MICEX RGBI TR) / yield
micex cbi tr: MICEX Index corporate bonds (MICEX CBI TR) / yield
deposits value: Volume of household deposits
deposits_growth: Volume growth of population's deposits
deposits rate: Average interest rate on deposits
mortgage value: Volume of mortgage loans
mortgage growth: Growth of mortgage lending
mortgage rate: Weighted average rate of mortgage loans
grp: GRP of the subject of Russian Federation where Apartment is located
grp growth: Growth of gross regional product of the subject of the Russian Federation where
Apartment is located
income per cap: Average income per capita
real dispos income per cap growth: Growth in real disposable income of Population
salary: Average monthly salary
salary growth: Growth of nominal wages
fixed basket: Cost of a fixed basket of consumer goods and services for inter-regional
comparisons of purchasing power
retail trade turnover: Retail trade turnover
retail trade turnover per cap: Retail trade turnover per capita
retail trade turnover growth: Retail turnover (in comparable prices in% to corresponding period
of previous year)
labor force: Size of labor force
unemployment: Unemployment rate
employment: Employment rate
invest fixed capital per cap: Investments in fixed capital per capita
invest fixed assets: Absolute volume of investments in fixed assets
profitable enterpr share: Share of profitable enterprises
unprofitable enterpr share: The share of unprofitable enterprises
share own revenues: The share of own revenues in the total consolidated budget revenues
overdue wages per cap: Overdue wages per person
fin_res_per_cap: The financial results of companies per capita
marriages per 1000 cap: Number of marriages per 1,000 people
divorce rate: The divorce rate / growth rate
construction value: Volume of construction work performed (million rubles)
invest fixed assets phys: The index of physical volume of investment in fixed assets (in
comparable prices in% to the corresponding month of Previous year)
pop natural increase: Rate of natural increase / decrease in Population (1,000 persons)
pop migration: Migration increase (decrease) of population
pop total inc: Total population growth
childbirth: Childbirth
mortality: Mortality
housing fund sqm: Housing Fund (sqm)
lodging sqm per cap: Lodging (sqm / pax)
water pipes share: Plumbing availability (pax)
baths share: Bath availability (pax)
sewerage share: Canalization availability
gas share: Gas (mains, liquefied) availability
hot water share: Hot water availability
electric stove share: Electric heating for the floor
heating share: Heating availability
old house share: Proportion of old and dilapidated housing, percent
average life exp: Average life expectancy
infant mortarity per 1000 cap: Infant mortality rate (per 1,000 children aged up to one year)
perinatal mort per 1000 cap: Perinatal mortality rate (per 1,000 live births)
incidence population: Overall incidence of the total population
rent price 4+room bus: rent price for 4-room apartment, business class
rent price 3room bus: rent price for 3-room apartment, business class
rent price 2room bus: rent price for 2-room apartment, business class
rent price 1room bus: rent price for 1-room apartment, business class
rent price 3room eco: rent price for 3-room apartment, econom class
rent price 2room eco: rent price for 2-room apartment, econom class
rent price 1room eco: rent price for 1-room apartment, econom class
load of teachers preschool per teacher: Load of teachers of preschool educational institutions
(number of children per 100 teachers);
child on acc pre school: Number of children waiting for the determination to pre-school
educational institutions, for capacity of 100
```

```
school for 100 teachers)
students state oneshift: Proportion of pupils in high schools with one shift, of the total
number of pupils in high schools
modern education share: Share of state (municipal) educational organizations, corresponding to
modern requirements of education in the total number of high schools;
old education build share: The share of state (municipal) educational organizations, buildings
are in disrepair and in need of major repairs of the total number.
provision doctors: Provision (relative number) of medical doctors in area
provision nurse: Provision of nursing staff
load on doctors: The load on doctors (number of visits per physician)
power clinics: Capacity of outpatient clinics
hospital beds available per cap: Availability of hospital beds per 100 000 persons
hospital bed occupancy per year: Average occupancy rate of the hospital beds during a year
provision retail space sqm: Retail space
provision retail space modern sqm: Provision of population with retail space of modern formats,
square meter
retail trade turnover per cap: Retail trade turnover per capita
turnover catering per cap: Turnover of catering industry per person
theaters viewers per 1000 cap: Number of theaters viewers per 1000 population
seats theather rfmin per 100000 cap: Total number of seats in Auditorium of the Ministry of
Culture Russian theaters per 100,000 population
museum visitis per 100 cap: Number of visits to museums per 1000 of population
bandwidth sports: Capacity of sports facilities
population reg sports share: Proportion of population regularly doing sports
students reg sports share: Proportion of pupils and students regularly doing sports in the total
number
apartment build: City residential apartment construction
apartment fund sqm: City residential apartment fund
# Complete description of neighbourhood features
area m Area mun. area, sq.m.
raion popul Number of municipality population. district
green zone part Proportion of area of †â€ greenery in the total area
             Share of industrial zones in area of â€⟨â€⟨the total area
                       Number of pre-school age population
children preschool
preschool quota Number of seats in pre-school organizations
preschool education centers raion
                                  Number of pre-school institutions
children school Population of school-age children
               Number of high school seats in area
school education centers raion Number of high school institutions
school education centers top 20 raion Number of high schools of the top 20 best schools in
                       Number of hospital beds for the district
hospital beds raion
healthcare centers raion
                               Number of healthcare centers in district
university top 20 raion Number of higher education institutions in the top ten ranking of the
Federal rank
                       Number of higher education institutions
sport objects raion
additional education raion
                               Number of additional education organizations
culture objects top 25 Presence of the key objects of cultural heritage (significant objects
for the level of the RF constituent entities, city)
culture objects top 25 raion
                               Number of objects of cultural heritage
shopping centers raion Number of malls and shopping centres in district
               Number of malls and shopping centres in district
office raion
thermal power plant raion Presence of thermal power station in district
incineration raion
                       Presence of incinerators
oil chemistry raion
                     Presence of dirty industries
radiation raion Presence of radioactive waste disposal
railroad terminal raion Presence of the railroad terminal in district
                       Presence of large grocery / wholesale markets
big market raion
nuclear reactor raion
                       Presence of existing nuclear reactors
                               Presence of detention centers, prisons
detention facility raion
                Total number of population in the municipality
full all
male f Male population
               Female population
female f
young all
                Population younger than working age
                Male population younger than working age
young male
young female
                Feale population younger than working age
work all
                Working-age population
```

work male

Malo working ago nonulation

load_of_teachers_school_per_teacher: Load on teachers in high school (number of pupils in hugh

```
work female
                Female working-age population
ekder all
                Population older than working age
                Male population older than working age
ekder male
ekder female
                Female population older than working age
0 6 all Population aged 0-6
0 6 male
                Male population aged 0-7
0 6 female
                Female population aged 0-8
                Population aged 7-14
7 14 all
7 14 male
                Male population aged 7-14
7 14 female
                Female population aged 7-14
0 17 all
                Population aged 0-17
0 17 male
                Male population aged 0-17
0 17 female
                Female population aged 0-17
16 29 all
                Population aged 16-19
                Male population aged 16-19
16 29 male
16 29 female
                Female population aged 16-19
                Population aged 0-13
0 13 all
0 13 male
                Male population aged 0-13
0 13 female
                Female population aged 0-13
raion build count with material info
                                        Number of building with material info in district
build count block
                        Share of block buildings
build count wood
                        Share of wood buildings
build count frame
                        Share of frame buildings
build count brick
                        Share of brick buildings
build count monolith
                        Share of monolith buildings
build count panel
                        Share of panel buildings
                        Share of foam buildings
build count foam
                        Share of slag buildings
build count slag
build count mix Share of mixed buildings
raion build count with builddate info
                                       Number of building with build year info in district
build count before 1920 Share of before 1920 buildings
build_count_1921-1945
                        Share of 1921-1945 buildings
build count 1946-1970
                        Share of 1946-1970 buildings
build count 1971-1995
                        Share of 1971-1995 buildings
build count after 1995 Share of after 1995 buildings
                Male population aged 7-14
7 14 male
                Female population aged 7-14
7 14 female
0 17 all
                Population aged 0-17
0 17 male
                Male population aged 0-17
0 17 female
                Female population aged 0-17
16 29 all
                Population aged 16-19
16 29 male
                Male population aged 16-19
16 29 female
                Female population aged 16-19
0 13 all
                Population aged 0-13
0 13 male
                Male population aged 0-13
0 13 female
                Female population aged 0-13
metro min avto Time to subway by car, min.
metro km avto
                Distance to subway by car, km
metro min walk Time to metro by foot
metro km walk
                Distance to the metro, km
kindergarten km Distance to kindergarten
school km
                Distance to high school
park km Distance to park
                Distance to green zone
green zone km
industrial zone km
                        Distance to industrial zone
water treatment km
                        Distance to water treatment
cemetery km
                Distance to the cemetery
incineration km Distance to the incineration
railroad station walk km
                                Distance to the railroad station (walk)
railroad_station_walk_min
                                Time to the railroad station (walk)
ID railroad station walk
                                Nearest railroad station id (walk)
                                Distance to the railroad station (avto)
railroad station avto km
                                Time to the railroad station (avto)
railroad station avto min
                                Nearest railroad station id (avto)
ID railroad station avto
public transport station km
                                Distance to the public transport station (walk)
                                        Time to the public transport station (walk)
public transport station min walk
water km
                Distance to the water reservoir / river
water 1line
                First line to the river (150 m)
mkad km Distance to MKAD (Moscow Circle Auto Road)
ttk km Distance to the TTC (Third Transport Ring)
sadovoe km
               Distance to the Garden Ring
```

WOIK MAIL

mate working-age population

```
bulvar ring km The distance to the Boulevard Ring
                Distance to the city center (Kremlin)
kremlin km
                Distance to Nearest major road
big road1 km
               Nearest big road id
ID big road1
big road1 1line First line to the road (100 m for highwys, 250 m to MKAD)
               The distance to next distant major road
big road2 km
                2nd nearest big road id
ID big road2
               Distance to the railway / Moscow Central Ring / open areas Underground
railroad km
railroad 1line First line to the railway (100 m)
zd vokzaly avto km
                       Distance to train station
ID railroad terminal
                       Nearest railroad terminal id
bus terminal avto km
                       Distance to bus terminal (avto)
ID bus terminal Nearest bus terminal id
                       Distance to dirty industries
oil chemistry km
                       Distance to nuclear reactor
nuclear reactor km
                Distance to burial of radioactive waste
radiation km
power transmission line km
                               Distance to power transmission line
thermal power plant km Distance to thermal power plant
ts km Distance to power station
big market km Distance to grocery / wholesale markets
market shop km Distance to markets and department stores
               Distance to fitness
fitness km
swim_pool_km
               Distance to swimming pool
               Distance to ice palace
ice rink km
stadium km
               Distance to stadium
basketball km Distance to the basketball courts
                    Distance to hospice/morgue
hospice morgue km
detention facility km Distance to detention facility
public healthcare km
                       Distance to public healthcare
university km
                Distance to universities
                Distance to workplaces
workplaces km
shopping centers km
                       Distance to shopping centers
office km
                Distance to business centers/ offices
additional education km Distance to additional education
preschool km
                Distance to preschool education organizations
big church km
                Distance to large church
church synagogue km
                       Distance to Christian chirches and Synagogues
mosque km
               Distance to mosques
theater km
               Distance to theater
museum km
               Distance to museums
exhibition km
               Distance to exhibition
catering km
               Distance to catering
ecology Ecological zone where the house is located
green part 500 The share of green zones in 500 meters zone
prom part 500
                The share of industrial zones in 500 meters zone
office count 500
                        The number of office space in 500 meters zone
office sqm 500 The square of office space in 500 meters zone
trc count 500
                The number of shopping malls in 500 meters zone
                The square of shopping malls in 500 meters zone
trc sqm 500
cafe count 500 The number of cafes or restaurants in 500 meters zone
cafe sum 500 min price avg
                                Cafes and restaurant min average bill in 500 meters zone
cafe sum 500 max price avg
                               Cafes and restaurant max average bill in 500 meters zone
cafe avg price 500
                       Cafes and restaurant average bill in 500 meters zone
cafe count 500 na price Cafes and restaurant bill N/A in 500 meters zone
cafe count 500 price 500
                                Cafes and restaurant bill, average under 500 in 500 meters zone
cafe count 500 price 1000
                               Cafes and restaurant bill, average 500-1000 in 500 meters zone
cafe_count_500_price_1500
                                Cafes and restaurant bill, average 1000-1500 in 500 meters zone
                                Cafes and restaurant bill, average 1500-2500 in 500 meters zone
cafe count 500 price 2500
cafe count 500 price 4000
                                Cafes and restaurant bill, average 2500-4000 in 500 meters zone
cafe_count_500_price_high
                                Cafes and restaurant bill, average over 4000 in 500 meters zone
                        The number of big churchs in 500 meters zone
big_church_count_500
                        The number of churchs in 500 meters zone
church count 500
                        The number of mosques in 500 meters zone
mosque count 500
                        The number of leisure facilities in 500 meters zone
leisure count 500
sport count 500 The number of sport facilities in 500 meters zone
                        The number of markets in 500 meters zone
market count 500
green part 1000 The share of green zones in 1000 meters zone
prom part 1000 The share of industrial zones in 1000 meters zone
                        The number of office space in 1000 meters zone
office count 1000
office sqm 1000 The square of office space in 1000 meters zone
trc count 1000 The number of shopping malls in 1000 meters zone
```

```
The square of shopping malls in 1000 meters zone
trc sqm 1000
cafe count 1000 The number of cafes or restaurants in 1000 meters zone
                                Cafes and restaurant min average bill in 1000 meters zone
cafe sum 1000 min price avg
cafe sum 1000 max price avq
                                Cafes and restaurant max average bill in 1000 meters zone
                        Cafes and restaurant average bill in 1000 meters zone
cafe avg price 1000
                                Cafes and restaurant bill N/A in 1000 meters zone
cafe count 1000 na price
                                Cafes and restaurant bill, average under 500 in 1000 meters zone
cafe count 1000 price 500
                                Cafes and restaurant bill, average 500-1000 in 1000 meters zone
cafe count 1000 price 1000
                                Cafes and restaurant bill, average 1000-1500 in 1000 meters
cafe count 1000 price 1500
                                Cafes and restaurant bill, average 1500-2500 in 1000 meters
cafe count 1000 price 2500
zone
cafe count 1000 price 4000
                                Cafes and restaurant bill, average 2500-4000 in 1000 meters
cafe count 1000 price high
                                Cafes and restaurant bill, average over 4000 in 1000 meters
zone
                        The number of big churchs in 1000 meters zone
big church count 1000
                        The number of churchs in 1000 meters zone
church count 1000
                        The number of mosques in 1000 meters zone
mosque count 1000
                        The number of leisure facilities in 1000 meters zone
leisure count 1000
sport count 1000
                        The number of sport facilities in 1000 meters zone
market count 1000
                        The number of markets in 1000 meters zone
green part 1500 The share of green zones in 1500 meters zone
prom part 1500 The share of industrial zones in 1500 meters zone
                        The number of office space in 1500 meters zone
office count 1500
office sqm 1500 The square of office space in 1500 meters zone
trc count 1500 The number of shopping malls in 1500 meters zone
                The square of shopping malls in 1500 meters zone
trc sqm 1500
cafe count 1500 The number of cafes or restaurants in 1500 meters zone
cafe sum 1500 min price avg
                               Cafes and restaurant min average bill in 1500 meters zone
cafe sum 1500 max price avg
                                Cafes and restaurant max average bill in 1500 meters zone
cafe avg price 1500
                       Cafes and restaurant average bill in 1500 meters zone
cafe count 1500 na price
                               Cafes and restaurant bill N/A in 1500 meters zone
                                Cafes and restaurant bill, average under 500 in 1500 meters zone
cafe count 1500 price 500
                                Cafes and restaurant bill, average 500-1000 in 1500 meters zone
cafe count 1500 price 1000
                                Cafes and restaurant bill, average 1000-1500 in 1500 meters
cafe_count_1500_price_1500
                                Cafes and restaurant bill, average 1500-2500 in 1500 meters
cafe count 1500 price 2500
                                Cafes and restaurant bill, average 2500-4000 in 1500 meters
cafe count 1500 price 4000
                                Cafes and restaurant bill, average over 4000 in 1500 meters
cafe count 1500 price high
                        The number of big churchs in 1500 meters zone
big church count 1500
                        The number of churchs in 1500 meters zone
church count 1500
                        The number of mosques in 1500 meters zone
mosque count 1500
                        The number of leisure facilities in 1500 meters zone
leisure count 1500
                        The number of sport facilities in 1500 meters zone
sport count 1500
market count 1500
                        The number of markets in 1500 meters zone
green part 2000 The share of green zones in 2000 meters zone
prom part 2000 The share of industrial zones in 2000 meters zone
                        The number of office space in 2000 meters zone
office count 2000
office sqm 2000 The square of office space in 2000 meters zone
trc count 2000 The number of shopping malls in 2000 meters zone
                The square of shopping malls in 2000 meters zone
trc sqm 2000
cafe count 2000 The number of cafes or restaurants in 1500 meters zone
cafe sum 2000 min price avg
                               Cafes and restaurant min average bill in 2000 meters zone
cafe sum 2000 max price avg
                                Cafes and restaurant max average bill in 2000 meters zone
cafe avg price 2000
                       Cafes and restaurant average bill in 2000 meters zone
cafe_count_2000_na_price
                                Cafes and restaurant bill N/A in 2000 meters zone
                                Cafes and restaurant bill, average under 500 in 2000 meters zone
cafe count 2000 price 500
cafe count 2000 price 1000
                                Cafes and restaurant bill, average 500-1000 in 2000 meters zone
cafe count 2000 price 1500
                                Cafes and restaurant bill, average 1000-1500 in 2000 meters
zone
cafe count 2000 price 2500
                                Cafes and restaurant bill, average 1500-2500 in 2000 meters
cafe count 2000 price 4000
                                Cafes and restaurant bill, average 2500-4000 in 2000 meters
zone
                                Cafes and restaurant bill, average over 4000 in 2000 meters
cafe count 2000 price high
```

The number of big churchs in 2000 meters zone

big church count 2000

```
The number of mosques in 2000 meters zone
mosque count 2000
                        The number of leisure facilities in 2000 meters zone
leisure count 2000
                        The number of sport facilities in 2000 meters zone
sport count 2000
                        The number of markets in 2000 meters zone
market count 2000
green part 3000 The share of green zones in 3000 meters zone
prom part 3000 The share of industrial zones in 3000 meters zone
                        The number of office space in 3000 meters zone
office count 3000
office sqm 3000 The square of office space in 3000 meters zone
trc count 3000 The number of shopping malls in 3000 meters zone
                The square of shopping malls in 3000 meters zone
trc sqm 3000
cafe count 3000 The number of cafes or restaurants in 1500 meters zone
                                Cafes and restaurant min average bill in 3000 meters zone
cafe sum 3000 min price avg
                                Cafes and restaurant max average bill in 3000 meters zone
cafe sum 3000 max price avg
                        Cafes and restaurant average bill in 3000 meters zone
cafe avg price 3000
                                Cafes and restaurant bill N/A in 3000 meters zone
cafe count 3000 na price
                                Cafes and restaurant bill, average under 500 in 3000 meters zone
cafe count 3000 price 500
                                Cafes and restaurant bill, average 500-1000 in 3000 meters zone
cafe count 3000 price 1000
                                Cafes and restaurant bill, average 1000-1500 in 3000 meters
cafe_count_3000_price_1500
                                Cafes and restaurant bill, average 1500-2500 in 3000 meters
cafe count 3000 price 2500
                                Cafes and restaurant bill, average 2500-4000 in 3000 meters
cafe count 3000 price 4000
                                Cafes and restaurant bill, average over 4000 in 3000 meters
cafe count 3000 price high
                        The number of big churchs in 3000 meters zone
big church count 3000
                        The number of churchs in 3000 meters zone
church count 3000
                        The number of mosques in 3000 meters zone
mosque count 3000
                        The number of leisure facilities in 3000 meters zone
leisure count 3000
                        The number of sport facilities in 3000 meters zone
sport count 3000
                        The number of markets in 3000 meters zone
market count 3000
green part 5000 The share of green zones in 5000 meters zone
prom part 5000 The share of industrial zones in 5000 meters zone
                        The number of office space in 5000 meters zone
office count 5000
office sqm 5000 The square of office space in 5000 meters zone
trc count 5000 The number of shopping malls in 5000 meters zone
                The square of shopping malls in 5000 meters zone
trc sqm 5000
cafe count 5000 The number of cafes or restaurants in 1500 meters zone
                                Cafes and restaurant min average bill in 5000 meters zone
cafe sum 5000 min price avg
                                Cafes and restaurant max average bill in 5000 meters zone
cafe sum 5000 max price avg
cafe avg price 5000
                        Cafes and restaurant average bill in 5000 meters zone
cafe count 5000 na price
                                Cafes and restaurant bill N/A in 5000 meters zone
                                Cafes and restaurant bill, average under 500 in 5000 meters zone
cafe count 5000 price 500
                                Cafes and restaurant bill, average 500-1000 in 5000 meters zone
cafe count 5000 price 1000
                                Cafes and restaurant bill, average 1000-1500 in 5000 meters
cafe_count_5000_price_1500
zone
                                Cafes and restaurant bill, average 1500-2500 in 5000 meters
cafe count 5000 price 2500
zone
                                Cafes and restaurant bill, average 2500-4000 in 5000 meters
cafe_count_5000_price_4000
                                Cafes and restaurant bill, average over 4000 in 5000 meters
cafe count 5000 price high
                        The number of big churchs in 5000 meters zone
big church count 5000
                        The number of churchs in 5000 meters zone
church count 5000
                        The number of mosques in 5000 meters zone
mosque count 5000
                        The number of leisure facilities in 5000 meters zone
leisure count 5000
                        The number of sport facilities in 5000 meters zone
sport count 5000
                        The number of markets in 5000 meters zone
market count 5000
```

The number of churchs in 2000 meters zone

church_count_2000

</body></html>