This master thesis deals with the analysis of housing prices in Prague. The main goal is to identify and explain the factors which have an influence on the prices of flats at the macro and micro level. Two spatial statistic methods, namely multiple linear regressions and geographically weighted regressions (GWR), are used in the first part of the thesis, which deals with the prices in Prague in general. The influence on the values of flats in Prague basic settlement units caused by several factors such as the distance from the Old Town Square, age of dwellings, the presence of migrants or air pollution was investigated using these two methods. The price map of the association of real estate agencies, the Czech Statistical Office and the Prague Institute of Planning and Development provided the data used in the presented research. Price profiles from the centre of Prague to the suburbs in various directions were also created and analyzed. Factors with an influence on housing prices at the micro level in a case study of the Prague cadastral territory of Modřany are described in the second part of the thesis. The analysis of new developer projects and older flats in panel houses investigates the influence on the housing prices caused by factors such as noise, physical condition of apartments and the quality of transport connections to city centre.