Function extension is a classical problem in mathematics. In this thesis we look into an extesion of realvalued functions defined on metric spaces. The first chapter is introductory and describes extension problem. In the second one we discuss a known method for extension of special family of uniformly continuous functions and show that the method can be modified for continuous functions. The third chapter examines a method for extension of continuous functions described by Whitney. Finally, in the last chapter we show a characterisation of uniformly continuous function, having uniformly continuous extensions.