A Review of Programming Paradigms Used in R

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ABSTRACT

Programming paradigms are classifications of the styles, steps and ways to solve problems in programming languages. Each language has either a combination of different ways or a unique way to solve a problem. Since, R is a combination of imperative and declarative styles, and combines all the paradigms to solve the different problems, so it doesn't enforce any particular paradigms. Moreover, both functional and object-oriented paradigms make up most of R but they do not follow the traditional requirements and rules of those paradigms. Therefore, this leads to the study of how R, is a multi-paradigm to solve the problems. Here, we have discussed programming paradigms, implementation of different programming paradigms to solve problems with R, and the limitations of R's multi-paradigm design.

Keywords: Programming paradigms, R Language, Statistical computing.

