ABSTRACT

ANALYSIS OF EFFECT OF VARIABLE TYPE THAT SPEED RUNNING CASE STUDY COMPUTER ANSWERS TO OLYMPICS

By RINALDI

In the programming competition, there were several criteria of assessment one of them was runtime program. The increasing of competition, required the participant to formulate appropriate. This research would discuss the influence of the variable type on runtime program. Each program that tested used only one algorithm and one variable type. The runtime data that collected from the used of five type of variable (*longint, integer, word, byte, shortint*). On the each program were compared to find out shortest runtime. Based on the result, it can be concluded that there effect of the use of variable type on program running speed (runtime). Findings the research showed that *shortint* is the best variable type used for the *mengevaluasi_ekspresi_aljabar* program, the *analisis_ekspresi_aljabar* program and the *mencari_multipalindrom_pada_ suatu_tulisan* program. However *byte* is the best variable type used for the *mencari_beda_tertinggi* program and the *mencari_massa* program

Keyword: runtime, one-way Anova, variable type