Binary Codes from AutL3(4) Lucy Chikamai

Abstract

Codes are used to correct errors caused during transmission of data. Codes are constructed from various mathematical objects including incident matrices of graphs, designs and other combinatorial objects. Recently, codes obtained from finite simple groups have attracted a lot of attention from researchers. The interplay between codes and these mathematical objects have helped solve some hitherto unsolved problems. In this paper, binary codes obtained from the primitive permutation representation of degree 105 from the group AutL3(4) are constructed and studied.

Key words: