Abstract. The notion of fuzzy set was introduced in mathematics and system theory by L. A. Zadeh in 1965. The theory of differential subordination was introduced by S. S. Miller and P. T. Mocanu. In the present paper, by making use of the concept of fuzzy differential subordination and using a certain operator $S^n$, we introduce a fuzzy class of holomorphic functions $S^n(\beta)$, and obtain some fuzzy subordination results. We also show that the set $S^n(\beta)$ is convex and obtain some new fuzzy differential subordinations related to certain integral operator.

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