

## **ABSTRACT**

Divorce issues between husband and wife often occur in Ambon City with various problems. Problems that are often the reason for divorce in Ambon city are not having children, separated houses, domestic violence, different religions and others.

K-nearest neighbor is a classification method that determines the closest distance or approaches between old data / samples with new data / new cases. The data used is the divorce data contained in the divorce certificate. The input that must be entered by the user is the name of the husband and wife, the date of marriage and entering the indicator prepared by the system. The output of the system is the prediction of divorce and the percentage of divorce. Features in this program can identify users who use the program and only registered users can use the system, there are prediction reports. The program can predict with  $k = 3$ ,  $k = 5$ , and  $k = 7$  and the program can produce a percentage of divorce.

Based on the results of the success system analysis that uses testing data in predicting a married couple using  $k = 3$  is 80%,  $K = 5$  is 90%,  $k = 7$  is 80% and the percentage success is 70% which is in accordance with the original data. Thus it can be concluded that being able to predict divorce with a high presentation of success.