## **Abstract**

Indonesia is a nation based on law that owns all kinds of law regulation, one of them is called Kitab Undang-Undang Hukum Pidana (KUHP) used to arrange assorted crime acts. Types of crime act in KUHP consist of criminal and infringement. Criminal law is a very complex problem so it is difficult for civilian to understand and to sort the sections arranging a law case. It often bewilders civilian when they get trouble with a law case so it needs a computer program to comprehend and to sort the sections corresponding in a case of criminal law. Major criticism in this final duty is act of planning and construction of rule based expert system application for the criminal law problems toward security and orderliness. Development of this expert system uses forward chaining inference method, that is inference process starting seeking from premise or data to conclusion. Lawbook of this expert system program is adopted from KUHP which is valid at this time. The problems of criminal law that will be discussed include crime toward: national security, general orderliness, abetment and mean planning, smirching grave and dead body, obligation and rights of matters pertaining to the state, and also crime endangering the state security for people or objects.

**Keywords:** Forward Chaining, Expert System, Rule Based, *KUHP*.