

The rapid rise in the technology today has brought to limelight mobile devices which are now being used as a tool to commit crime. Therefore, proper steps need to be ensured for Confidentiality, Integrity, Authenticity and legal acquisition of any form of digital evidence from the mobile devices. This study evaluates some mobile forensic tools that were developed mainly for mobile devices memory and SIM cards. An experiment was designed with five android phones with different Operating System. Four tools were used to find out the capability and efficiency of the tools when used on the sampled phones. This would help the forensic investigator to know the type of tools that will be suitable for each phone to be investigated for acquiring digital evidence. The evaluation result showed that AccessData FTK imager and Paraben device seizure performs better than Encase and Mobileedit. The experimental result shows that, Encase could detect the unallocated space on the mobile device but could not retrieve any deleted data.