This thesis presents the design and construction of a PAL programmer, which is an important tool for PLD development system This equipment is connected to an IBM PC microcomputer or compatible by using a specially designed plug in interface card. The PAL programmer software include standard functions for programming of PAL devices such as read, program, verify, blank check and selection of PAL devices. Applicable devices are all DIP 20 and 24 pins PAL devices. PAL programmer software is user friendly and menu driven program, it provides all facilities required for PAL designer. The developed PAL programmer is very helpful in designing logic circuit. The knowledge acquired in this work can be applied to the programming of other PLD devices.