NAME: SHOSAN HADIJAT ABIMBOLA

MATRIC NO:17/SCI01/076

Loop and switch scanner

A "loop & switch" implementation consists of a main loop that reads characters one by one from the input file and uses a switch statement to process the character(s) just read. The output generated is a list of tokens and lexemes from the source program. The following program fragment shows a skeletal implementation of a simple loop and switch scanner. It is not really sophisticated compiler, cannot handle much more problem. The main program calls InitScanner and loops calling ScanOneToken until EOF (End of File). ScanOneToken reads the next character from the file and switches off that char to decide how to handle what is coming up next in the file. The return values from the scanner can be passed on to the parser in the next phase. Loop-and-switch scanners are sometimes called ad hoc scanners, indicating their design and purpose of solving a specific instance rather a general problem. For a sufficiently reasonable set of token types, a hand coded, loop and switch scanner might be all that's needed— it requires no other tools.