COMPILER DESIGN
SYNOPSIS

ON

TOPIC: MINI PYTHON COMPILER

Group members: Ashish Kumar (2K18/SE/041)
Anmol Yadav(2K18/SE/028)

- ## Description about project

Our aim is to develop a mini python compiler in which we will be doing following things:

1. First we will do lexical analysis of the given input python code, from which we will generate symbol table and identify the tokens.
2. Then we will do syntax analysis in which we will generate AST (Abstract Syntax tree).
3. Using AST, we will generate unoptimised intermediate code. Then we will convert this into optimised intermediate code and display symbol table before and after optimisation.
4. After converting into optimised ICG, we will use this to generate target code (Target code generation deals with assembly language to convert optimized code into machine understandable format).
5. We also taking care of error handling (like syntax error and semantic error in the given input code).
6. Finally all of this above steps will be compiled and hence we will be executing all phases of the compiler.

- ## Languages used to develop this project

1. C
2. C++
3. YACC
4. LEX
5. PYTHON

- ## Tools used

1. Flex (to make lex program work)
2. Bison (to make yacc program work)