Lab-1: CSE 402 Compiler Design
*****C program*****

```
#include<stdio.h>
int main()
{
    printf("Hello World!\n");

  return 0;
}
```

*****Commands*****

1) .c file to direct .exe file: **gcc input_filename.c**
creates an executable file a.exe
Run it:
.\a
a.exe

2) Renaming the executable file : **gcc -o output_filename input_filename.c**
creates an executable file output_filename.exe
Run it:
.\outputfilename
outputfilename.exe

3)
i) Preprocessor:
gcc -E input_filename.c > output_filename.i
Creates a modified source file output_filename.i

ii)Compiler:
gcc -S -masm=intel output_filename.i
Creates an assembly file output_filename.s

iii)Assembler:
as -o output_filename.o output_filename.s
Creates an object file output_filename.o
To see whats inside the object file :
Objdump -M intel -d output_filename.o > output_filename.dump

iv)Linker
gcc output_filename.o -o output_filename.exe
Or,
gcc output_filename.o -o output_filename
Creates an executable file output_filename.exe

v)Loader:
output_filename.exe
The Program Executes on Memory.