

# A Little Bit About the C Preprocessor



# The C Preprocessor

- Running gcc to compile a program actually automatically invokes several programs (e.g. cpp, gcc, asm, ld). If you want, you can stop the process at any point.
  - preprocessor -> compiler -> assembler -> linker
- The C preprocessor (cpp) does not understand C! It merely/blindly makes substitutions and inclusions with NO UNDERSTANDING OF C SYNTAX



# Need to Know Now

- Simple macros replace the first word with remainder of line

```
#define TRUE 1
```

- Including files puts a copy of that file inline (useful for getting function declarations and #defines)

```
#define <stdio.h>
```

- Conditional compilation. In homework progs, enclose main like so:

```
#ifndef TEST_1XX
```

```
int main(){
```

```
    // code
```

```
}
```

```
#endif
```