

18) 1. Preprocessing. The preprocessor takes the program.c source code and produces an equivalent .c source code, performing operations such as removing comments.

2. **Compiling.** The compiler turns the preprocessed code into assembly code for the specific processor.

3. **Assembling.** The assembler converts the assembly instructions into processor-dependent machine-level binary object code.

4. **Linking.** The linker takes one or more object code files and produces a single executable file.

19) An int which is 0 if the program is successful and something else if it is not

- 21) 1) 140
 2) 4
 3) 24

- 22) a) 0
 b) 0.667
 c) 0.000
 d) 3
 e) 3
 f) 3.000

27) First, I will check each individual function to see if I get what I expect. If I do then I will look at the data types. Depending on the error this could cause overflow or problems printing. I will also look at the variables and loops and make sure they are working by putting prints to see if they give the values I expect when I run the program.

28) done

- 30) a) 3
 b) 4
 c) 2
 d) 6
 e) error/unknown
 f) error/unknown
 g) 2

31) $i = 3 * 1 + 2 + 0$
 $i = 5$

 This is the case because the Booleans return 0 or 1 for false and true

- 32) a) 0xF2
 b) 0x01

c)0x0F
d)0x0E
e)0x01
f)0x68
g) 0x00

34)asci.c

35)bubb.c