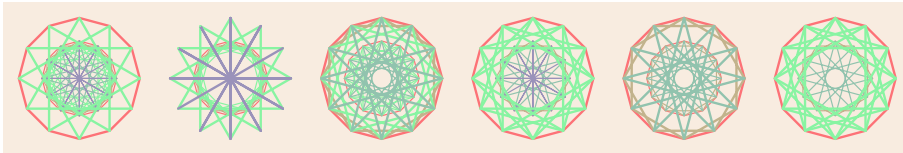


Exercises

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1. What is GNU?
 - (a) a large African animal—it is a kind of antelope and is also called a wildebeast
 - (b) a collection of free, open source software
 - (c) an operating system that resembles UNIX
 - (d) all of the above
2. GCC is the GNU Compiler Collection. It is a very popular compiler for the C language (although programmers can also use it to compile programs written in some other languages).

Typing `gcc` can cause several programs to run in sequence. These several programs make an executable file from a programmer's source code.

In which sequence do these several programs run?

 - (a) preprocessor—compiler—assembler—linker
 - (b) linker—preprocessor—compiler—assembler
 - (c) assembler—linker—preprocessor—compiler

- (d) compiler—assembler—linker—preprocessor
3. The 'h' in `stdio.h` stands for...
 - (a) 'hack'
 - (b) 'halo'
 - (c) 'header'
 - (d) 'help'
 4. A header file like `stdio.h` is...
 - (a) a binary file that the compiler produced
 - (b) a text file that a person can read
 5. Which of these directives do we need if we wish to make use of the `printf()` function in our program?
 - (a) `#include <math.h>`
 - (b) `#include <stdio.h>`
 - (c) `#include <stdlib.h>`
 - (d) `#include <string.h>`
 6. The `#include` directive is a command to the preprocessor. The preprocessor is like an automatic text editor. What kind of editing are we asking the preprocessor to do when we type `include@`?
 - (a)
 - (b) insert contents of one file into another file
 - (c) find and replace
 7. Which of these directives do we need if we wish to make use of the `exit()` function in our program?
 - (a) `#include <math.h>`
 - (b) `#include <stdio.h>`
 - (c) `#include <stdlib.h>`
 - (d) `#include <string.h>`
 8. Which of these directives do we need if we wish to make use of the `strlen()` function in our program?
 - (a) `#include <math.h>`
 - (b) `#include <stdio.h>`
 - (c) `#include <stdlib.h>`

(d) `#include <string.h>`

9. In a C program, a string is an array of characters with a special character at the end of the letters, digits, whitespace, and punctuation that make up the string.

What is that special character?

(a) `'\0'`

(b) a space character

(c) a tab character

(d) a newline character

10. What type of value does the `strcmp()` function return to its caller?

(a) **boolean**

(b) **char***

(c) **int**

(d) **void**