

How to use the GNAT Ada compiler on elvis at Rowan University

Note: These instructions apply to programs that are small enough to fit into a single source file, such as the ones you will be writing for the Programming Languages homework. Larger Ada programs may involve splitting the program into several different files, separating the specifications from the body or creating separately compiled packages; gnatmake is also used to compile these larger programs, but the instructions for them will be a little more complicated.

- 1) **Create your Ada program file** using your favorite text editor (emacs, vi, pico, etc.). When you save the file, save it with an `.adb` extension.

The compiler will be happiest if your file name is the same as the name of the main procedure in the program, with `".adb"` added.

- 2) To **compile the program**, at the elvis prompt type `gnatmake` followed by the name of the program file. If compilation is successful, the compiler will produce an executable file with the same name as the source file, but omitting the `adb` extension.

For example, suppose you have named your Ada homework file `homework.adb`. To compile the program, type

```
gnatmake homework.adb
```

Or, you can omit the extension, thus:

```
gnatmake homework
```

In either case, the resulting executable will be called `homework` and will be located in the current directory.

- 3) Like many C compilers, the Ada compiler will give **errors** (problems that must be fixed before the program will compile) and **warnings** (problems that aren't serious enough to prevent compilation). Fix all the errors and look carefully at the warnings, then recompile as needed.
- 4) To **run the program**, type the name of the executable. If your path does not contain the current directory, you will need to precede the name of the executable with `./` to indicate which directory it's in.

For example, if you have compiled `homework.adb`, then at the elvis prompt you should type

```
./homework
```

to run the program.