

# Fortran, Computing Resources, etc

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# Mac

- <http://gcc.gnu.org/wiki/GFortranBinaries>
- Download installer for your OS
- Download Xcode (in Mac App Store)
- Download an editor ( I use TextWrangler, it is in Mac App Store as well)
- `gfortran -o <executable file name> hello.f90`
- `./<executable file name>`

# Windows

- <https://sourceforge.net/projects/mingw/files>
- Download mingw-get-setup.exe
- Run it
- MinGW Installation Manager
- Click on the packages you want to install (choose “A Basic MinGW Installation”, “The GNU FORTRAN COMPIILER”, and “A Basic MSYS Installation” or all (in case you need))
- Installation > Apply Changes
- Command window
- set PATH=C:\mingw\bin;%PATH%

# Editor

- <https://wiki.gnome.org/Apps/Gedit>
- Click Download > Windows 64 bit binaries
- gedit-x86\_64-3.20.1.msi
- Install gedit
- Open a new file, and write a fortran code that prints “Hello World!”
- gfortran -o <executable file name> <fortran file>
- <executable file name>

# Resources

- ARCS: <http://arcs.virginia.edu> (Assist UVA community on computation)
- Rivanna (Linux cluster of UVA ):  
<http://www.uvacse.virginia.edu/rivanna>
- Go to “connect” and ask for access to the Rivanna (frontend, after activation you can use your UVA id and password)
- Faculty, staff, and postdocs can get machine time  
<http://arcs.virginia.edu/getting-allocation-hpc-system>
- 5000 trial core hours. You need to pay for more.
- Students (us) needs to be part of a group to access the main cluster

# Mac

- Download Quartz <https://www.xquartz.org>
- `ssh -X ig7xs@interactive.hpc.virginia.edu`
- Change directory to your working directory
- `module load intel` (loads the compiler for your use)
- `ifort -o <executable file name> <fortran codes>`
- `./<executable file name>`
- “exit” when you are done

# Windows

- Install ssh client (SecureCRT or MobaXterm <http://mobaxterm.mobatek.net> )
- Download SecureCRT:  
[www.its.virginia.edu/software/securecrt](http://www.its.virginia.edu/software/securecrt)
- Download the SecureCRT installer ...
- > windows > Get from Uva Software >netbage
- Chose your OS system and get it (buy it for free, check-out)  
–follow the purchase procedures
- Install it
- Hostname: interactive.hpc.virginia.edu
- Username: <your user id> (after you activate your account)
- When prompted, enter your password

# Windows (cnt'd)

- module load intel (loads the compiler for your use)
- ifort -o <executable file name> <fortran codes>
- ./<executable file name>
- 'exit' when you are done