## Assignment 1

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## 1 The Bourne Again Shell (Bash)

## 1.1 Bash environments and basics

1. What is Bash?

Bash is an interactive language in the Unix command shell. It is a commandline interpreter for users to interact with the operating system by running commands, scripts, and programs

- 2. Explain briefly what the difference between .bashrc and .bash\_profile?
  .bashrc (rc: read command) is executed for interactive non-login shells, such as the shell environment. It is a configuration file for the environment that includes aliases and functions etc. Meanwhile, .bash\_profile is executed for login shells and configures the behaviour of the environment settings and commands that run when a user logs in, for example when remotely (or re"motley" ha) SSH-ing.
- 3. How do you show all the directories that are listed in the PATH environment variable? echo \$PATH
- 4. What is the PATH variable good for?

  The PATH variable allows the shell to locate executable files when a commands is entered. It identifies the directories to be searched to find the command
- 5. What is the file descriptor FD0 normally used for (by default)? File Descriptor FD0 is the standard output where most processes receive their input from. By default, it is typically the keyboard, i.e. the input the terminal program receives.
- 6. Provide the command line that redirects the standard output and the standard error
  - Bash > ls \* wrong\_path\_or\_file to the same file called shell.out.

ls \* wrong\_path\_or\_file &> shell.out