**Git Commands**

**$ git init** - This initializes the repository

**$ git status** - This will give the status of changes that are done for commit.

**$ git add <*filename>*** - This will add the unstaged file to staged for commit.

**$ git add .** - This command will add multiple unstaged files to staged for commit.

**$ git clone** - This used to make a copy of an existing repository to a local folder.

**$ git branch** - This will provide which is the current working tree

**$ git pull origin master** - This will fetch and download the latest modified repository to local.

**$ git push origin master** - This pushes the committed changes to master.

**$ git checkout -b <*master/branchname>*** - This will switch to a working tree of respective branch specified.

**$ git checkout master** - This command will switch to master

**How are high level programs gets converted to low-level machine code(binary code)?**

When the compiler compiles the code, it will convert the code into assembly language. Compilers can take a while, because they have to translate high-level code to lower-level machine language all at once and then save the executable object code to memory. A compiler creates machine code that runs on a processor with a specific Instruction Set Architecture (ISA), which is processor-dependent. Then assembler translates a program written in assembly language into machine language and is effectively a compiler for the assembly language. This assembler produce the binary code in the last.

**How are instructions fed to CPU?**

CPU just understands binary code which is 0 and 1. CPU read the instruction memory and execute those instructions. CPU has instruction processing unit and execution unit as well. Instruction processing unit decode the instructions this result is stored in the memory then the execution unit executes the result.

**What is compiler?**

A compiler is a program that translates a source program written in high-level programming language into machine code for computer architecture. The generated machine code can be later executed many times against different data each time.