

- 1- I am working on V8 engine
- 2- Downloaded V8, using GIT
  - a- Install git and svn git  
`apt-get install git git-svn`
  - b- Clone the repository from github  
`git clone git://github.com/v8/v8.git v8 && cd v8`
  - c- Staying up to date  
`git pull --rebase origin mater`
- 3- Trying to configure and build V8 src code  
`make dependencies`  
 but there was an error, which was  
`svn checkout --force http://googlecode.com/svn/trunk/build/gyp/  
 --revision 1831`  
`Make: svn: command not found`  
`Make: ***[dependencies] Error 127`  
 Solution:  
 install subversion  
`sudo apt-get install subversion`  
 then..  
`svn co http://googlecode.com/svn/trunk/build/gyp`  
 or "must be at the root of V8"  
`make dependencies`

This command takes long time

- 4- Building v8
  - a- At the top of v8  
`make ia32.release`
  - b- Or `make` or `make native`  
 But both gave me an error, which is  
`from ../src/accessors.cc:28:`  
`/usr/include/features.h:324:26: fatal error: bits/predefs.h: No such file or  
 directory`  
`compilation terminated.`  
`make[1]: *** [/home/sara/V8src/v8-  
 master/out/x64.release/obj.target/v8_base.x64/src/accessors.o] Error 1`  
`make[1]: Leaving directory `/home/sara/V8src/v8-master/out'`  
`make: *** [x64.release] Error 2`  
 I thought this because of 64 bit and 32 bit version, to know what my  
 computer is  
`uname -a`  
`Linux ubuntu 3.8.0-29-generic #42~precise1-Ubuntu SMP Wed Aug 14  
 15:31:16 UTC 2013 i686 i686 i386 GNU/Linux`

So my machine is 32 bit, so I wondered because the error is due to compiling 32 bit application on 64 bit machine!! "That what I got from googling"

then try to solve this error `fatal error: bits/predefs.h: No such file or directory`  
`compilation terminated.`

" this error was caused on x86\_64, by not installing `gcc-multilib`, because Ubuntu and Debian use the mutiarch system, separating the libraries."

using

```
sudo apt-get install gcc-multilib
```

This command will upgrade this `libc6-dev: i386`

Then try again with

```
make ia32.release or make
```

gave me a new error,

```
cannot find -lstdc++
```

```
collect2: ld returned 1 exit status
```

```
make[1]: ***
```

&

`and linking incompatible`

I thought maybe `libstdc++` is missing in my machine, so I tried to locate it firstly using this command

```
locate libstdc++
```

and the it is already in my machine,

So I realized that there is something wrong with `ia32.release` and then tried

```
make native
```

 this command will build for host architecture

And `v8` was built successfully

#### 5- Simple application `hello_world.cpp`

a- To compile, this command depends on your machine, so I linked my libraries and changed in this command according to `v8` building command.

```
g++ -Iinclude hello_world.cpp -o hello_world -Wl,--start-group  
out/native/obj.target/{tools/gyp/libv8_{base.ia32,snapshot},third_party/icu/lib  
icu{uc,i18n,data}}.a -Wl,--end-group -lrt
```

c- To run

```
./hello_world
```

d- The output is:

