Integrate Bochs Environment with GDB

1. Uninstall the existed Bochs by  
   *sudo apt-get remove bochs*
2. Install x11 libraries  
   *sudo apt-get install xorg-dev*
3. Download the new Bochs source code package and unzip it
4. In the new Bochs source code directory. Configure Bochs with gdb stub enabled.  
   *sudo ./configure –enable-gdb-stub*
5. Compile bochs  
   *sudo make*
6. Move it to /usr/local/bin by  
   *sudo make install*
7. Use editor software to edit bochsrc.brxc and insert the line below:  
   *gdbstub: enabled=1, port=1234, text\_base=0, data\_base=0, bss\_base=0*
8. Edit the project makefile and add ‘-g’ in the compiler options to enable debugging symbols.  
   *SYNTAX: $ gcc –g [options] [source files] [object files] [-o output file]*
9. Run the bochs tool. It will wait for gdb connection on port 1234
10. Run gdb in another terminal and connect it to Bochs by:  
    *gdb -q kernel.o  
    target remote:1234*
11. We can now debug our project through gdb