

# Specification of Contestant PC

## Operating System

Ubuntu 20.04.5 LTS (Focal Fossa)

### Note

The manifestation of the following packages are from the previous ISO for ICPC Dhaka Regional 2021. Most of the packages are updated in the current ISO, reflecting a “sudo apt dist-upgrade” on Jan 24, 2023. [TODO] Update the package versions in this document.

## Compilers

- C
  - gcc-10 (Ubuntu 10.3.0-1ubuntu1~20.04) 10.3.0 (alias: **gcc** and **gcc-10**)
  - gcc-9 (Ubuntu 9.4.0-1ubuntu1~20.04.1) 9.4.0 (alias: **gcc-9**)
- C++
  - g++-10 (Ubuntu 10.3.0-1ubuntu1~20.04) 10.3.0 (alias: **g++** and **g++-10**)
  - g++-9 (Ubuntu 9.4.0-1ubuntu1~20.04.1) 9.4.0 (alias: **g++-9**)
- Java
  - openjdk 11.0.16 2022-07-19 (alias: **java**)
- Python 2
  - Python 2.7.18 (alias: **python2** and **python2.7**)
- Python 3
  - Python 3.10.7 (alias: **python3.10**)
  - Python 3.8.10 (alias: **python3** and **python3.8**)

## Editors

- VIM - Vi IMproved 8.1 (alias: **vim**)
  - [Feature list](#), [Basic Vimrc](#)
- GNU Emacs 26.3 (alias: **emacs**)
- GNU nano, version 4.8 (alias: **nano**)
- Sublime Text Build 3211 (alias: **subl**)
- Visual Studio Code 1.71.0 (alias: **code**)
- gedit - Version 3.36.2 (alias: **gedit**)

## IDEs

- Code::Blocks 20.03
  - +codeblocks-contrib, +codeblocks-common
  - [Default Settings](#)

- Geany 1.36
- IntelliJ IDEA Community Edition 2021.3
- PyCharm Community Edition 2021.3
- Apache Netbeans IDE 12.6

# APPENDIX

## Vim features

```
Huge version with GTK3 GUI.  Features included (+) or not (-):
+acl                -farsi             -mouse_sysmouse   -tag_any_white
+arabic             +file_in_path     +mouse_urxvt      +tcl
+autocmd            +find_in_path     +mouse_xterm      +termguicolors
+autocmdir          +float            +multi_byte       +terminal
-autoservername     +folding          +multi_lang       +terminfo
+balloon_eval       -footer           -mzscheme         +termresponse
+balloon_eval_term +fork()           +netbeans_intg    +textobjects
+browse             +gettext          +num64            +textprop
++builtin_terms     -hangul_input    +packages         +timers
+byte_offset        +iconv            +path_extra       +title
+channel            +insert_expand   +perl             +toolbar
+cindent            +job              +persistent_undo  +user_commands
+clientserver       +jumplist        +postscript       +vartabs
+clipboard          +keymap           +printer          +vertsplitted
+cmdline_compl     +lambda          +profile          +virtualedit
+cmdline_hist       +langmap         -python           +visual
+cmdline_info       +libcall         +python3          +visualextra
+comments           +linebreak       +quickfix         +viminfo
+conceal            +lispindent      +reltime         +vreplace
+cryptv            +listcmds        +rightleft       +wildignore
+cscope            +localmap        -ruby             +wildmenu
+cursorbind        +lua              +scrollbind      +windows
+cursorshape       +menu            +signs           +writebackup
+dialog_con_gui    +mksession       +smartindent     +X11
+diff               +modify_fname    +sound           -xfontset
+digraphs          +mouse           +spell           +xim
+dnd                +mousethshape    +startuptime     +xpm
-ebcdic            +mouse_dec       +statusline      +xsmp_interact
+emacs_tags        +mouse_gpm       -sun_workshop    +xterm_clipboard
+eval              -mouse_jsbterm   +syntax          -xterm_save
+ex_extra          +mouse_netterm   +tag_binary
+extra_search      +mouse_sgr       -tag_old_static
```

## .vimrc

```
syntax on
set termguicolors           " use full 24-bit color
set number                  " show line numbers
set autoindent              " automatic indent
set foldmethod=syntax      " syntax based folding
set nofoldenable           " don't open file in folds
set cursorline              " highlight the line under cursor
set laststatus=2           " show status bar
set linebreak               " don't break words
set scrolloff=5            " let 5 lines after cursor
```

```
set showcmd                " show commands
set wildmenu               " display all matching files when we
tab-complete
set tabstop=4              " tab size in columns
set shiftwidth=4           " indentation size
"
https://medium.com/@arisweedler/tab-settings-in-vim-1ea0863c5990
set noexpandtab            " don't insert spaces, default
set backspace=indent,eol,start " get backspace to work on these situations
```

## Code::Blocks Default Settings Checklist

The following are already done for you:

1. Go to Settings -> Editor -> General Settings and check (✓) the following items
  - a. Auto Indentation
  - b. Auto brace completion
  - c. Show line number
2. Unnecessary shortcut buttons should be removed from the menu bar to make the coding space larger
3. Go to Settings -> Compiler -> Global Settings -> Compiler Settings -> Compiler Flags and check (✓) the following items
  - a. Have g++ follow the C++14 ISO [-std=c++14]
  - b. Optimize even more (for speed) [-O2]
4. Go to Settings -> Environment -> General Settings -> Terminal to launch console programs, select **gnome-terminal** from drop down list