

# Gear Up: Let's Set Your Equipment and Playground

## A) Mastering Your Tool of Expression: Language

Hey there, coding enthusiasts! Let's chat about the cool kids on the competitive programming block: C++, Python, and Java. These three are like the Avengers of programming languages in the contest world!

Picture this: It's Google Code Jam 2017, and among the top 3,000 brainiacs, C++ is strutting its stuff with a whopping 79% of coders choosing it. Python's not far behind, charming 16% of the crowd, while Java's holding its own with 8%. Some clever cookies even juggle multiple languages – talk about linguistic gymnastics!

Now, why's everyone crushing on C++? Well, it's like the sports car of programming languages – super fast and comes with a trunk full of goodies (aka its standard library). Plus, it's the VIP guest at almost every contest party.

But hey, don't put all your eggs in one basket! Being a polyglot in the coding world is like having a Swiss Army knife – you've got a tool for every job. Take Python, for instance. When you need to crunch numbers bigger than your grandma's holiday feast, Python's got your back with its built-in big integer superpowers.

Don't sweat it though – contest organizers are pretty fair. They design problems so that no language gives you an unfair edge. It's not about the wand, it's about the wizard, right?

Oh, and if you're flipping through a competitive programming book, don't be surprised if C++ is splashed all over the pages. Many books, including the one you mentioned, are C++ fan clubs, often showing off the C++11 standard – it's like the cool new outfit that most contests are happy to see.

So, if C++ isn't in your coding wardrobe yet, maybe it's time to go shopping! But remember, the best language is the one that makes your coding heart sing.

Note:

If you can already have a hand in one of the programming language other than C++, then I would you to practice with it for at most one month with it ,so you can get familiar with the this.

After you get the grasp, you can switch to C++ later. It is your choice.

This is the only coding template in C++ you need to start your coding journey.

```
#include <bits/stdc++.h>

using namespace std;

int main() {
    // solution comes here
}
```

This is how you can input the variables.

```
int a, b;
string x;
cin >> a >> b >> x;
```

And this is how you can give output .

```
int a = 123, b = 456;
string x = "monkey";
cout << a << " " << b << " " << x << "\n";
```

These are the required things to follow during solving ...

## B) Your Creative Workspace: Editor Selection

Every coder needs an editor to code, a truth as universal as the quest for bug-free software. But finding your perfect match in the vast cosmos of code editors is like discovering your coding soulmate. It all boils down to your unique digital habitat and toolbox desires.

From the venerable Vim (the Gandalf of editors) to those snazzy online compilers that are as free as a bird, we've got a smorgasbord of options that'll make your coding fingers tingle with excitement!

Some coders swear by Vim's cryptic commands (exit Vim? Ha! That's for mere mortals!), while others prefer the cushiony comfort of modern IDEs with their fancy auto-completions and built-in linters.

Maybe you're a VS Code aficionado, customizing your editor more than your dating profile. Or perhaps you're an Emacs enthusiast, convinced that your editor can probably achieve sentience and take over the world someday.

These are some famous editor's used in CP World.

- 1) [JetBrains](#)
- 2) [VS Code](#)
- 3) [Sublime](#)
- 4) [CP-Editor](#)

And let's not forget our browser-based buddies! Online compilers and IDEs are like the fast food of coding – quick, convenient, and no dishes to wash afterwards!

Remember, the best editor is the one that makes your code flow like poetry and your debugging sessions feel less like wrestling a angry octopus. So try 'em all! Swipe right on that editor that makes your heart skip a beat and your productivity soar!

## C) Sharpen Your Skills: Sites to Practice

**Codeforces** – The *Battle Arena* of competitive programming! With its intense rounds and the wild mix of problem difficulty, this is where legends are made. Whether you're a newbie or a grandmaster, Codeforces has something for everyone. And the best part? It's super interactive with blogs, discussions, and even *memes* flying around after contests. It's like Hogwarts for competitive programmers, but instead of wands, you've got C++ and Python!

**AtCoder** – Welcome to the *Samurai Dojo* of problem-solving. Straight from Japan, AtCoder is sleek, precise, and all about clean and well-thought-out problems. If you want to sharpen your skills with elegant challenges and level up, this is the place. The contests here have a zen-like vibe, and many top coders say the problems are like a well-crafted sushi roll—balanced and delightful!

**LeetCode** – The *Gym* for technical interviews! LeetCode is where developers go to pump up their problem-solving muscles, preparing for their next big job interview at Google, Facebook, or any tech giant. From easy warm-up problems to mind-bending hards, LeetCode is a treasure chest of coding workouts. Plus, with discussions, solutions, and badges, it's like a video game for coders on a mission to get hired!

**CodeChef** – The *Indian Feast* of programming contests. Sponsored by one of India's biggest tech companies, CodeChef serves up delicious monthly contests, where coders from all over the world compete. There's a friendly, laid-back atmosphere here, and if you do well, you get a lot of respect. Plus, their long challenges give you 10 whole days to marinate on problems. Grab your brain, some chai, and dive in!

*“These are the big-league arena, lets start from the base so in time you can blast the charts in future....”*

**So let's coding then,**

**Here's a challenge for you, complete the entire question set and for each question make an excel sheet and make 2 columns .**

- 1) Problems Link**
- 2) Remark**

- **Give a point- wise review of the question and how did you approach for the solution.**

**Save the excel yourself so you can take again and find a better solution for them after sometime exploring and master some more exiting functions.**

*“This is to make a acknowledgment of yourself, that how far you came after the beginning of your journey.”*

Sl.No.	Questions	Levels
1	<a href="#">Watermelon</a>	Easy
2	<a href="#">Boy or Girl</a>	Easy
3	<a href="#">Word</a>	Medium
4	<a href="#">Translation</a>	Easy
5	<a href="#">Hulk</a>	Easy
6	<a href="#">Sum</a>	Easy
7	<a href="#">Marathon</a>	Easy
8	<a href="#">Short Sort</a>	Easy
9	<a href="#">Black Square</a>	Medium
10	<a href="#">Hit the Lottery</a>	Medium
11	<a href="#">To My Critics</a>	Easy
12	<a href="#">Fair Playoff</a>	Easy
13	<a href="#">A+B Again?</a>	Easy
14	<a href="#">Good Kid</a>	Easy
15	<a href="#">A Childhood Game</a>	Medium
16	<a href="#">Rooks</a>	Easy
17	<a href="#">Opposite Task</a>	Easy
18	<a href="#">Basketball One-on-One</a>	Medium
19	<a href="#">Intelligent Factorial Factorization</a>	Medium
20	<a href="#">Fibsieve's Fantabulous Birthday</a>	Easy
21	<a href="#">Rider</a>	Medium

22	<a href="#"><u>Guilty Prince</u></a>	Medium
23	<a href="#"><u>One Way Roads</u></a>	Medium
24	<a href="#"><u>Lift</u></a>	Medium
25	<a href="#"><u>Minimize!</u></a>	Easy
26	<a href="#"><u>Gifts Fixing</u></a>	Easy
27	<a href="#"><u>Yogurt Sale</u></a>	Medium
28	<a href="#"><u>Legs</u></a>	Easy
29	<a href="#"><u>LCM Problem</u></a>	Medium
30	<a href="#"><u>ICPC Balloons</u></a>	Easy

Do you feel it's a lot of questions .....

This is just the start.

After a lot of code I know you guys must have felt a lot of improving to be needed .

It's quiet natural as a young programmer to feel like that.