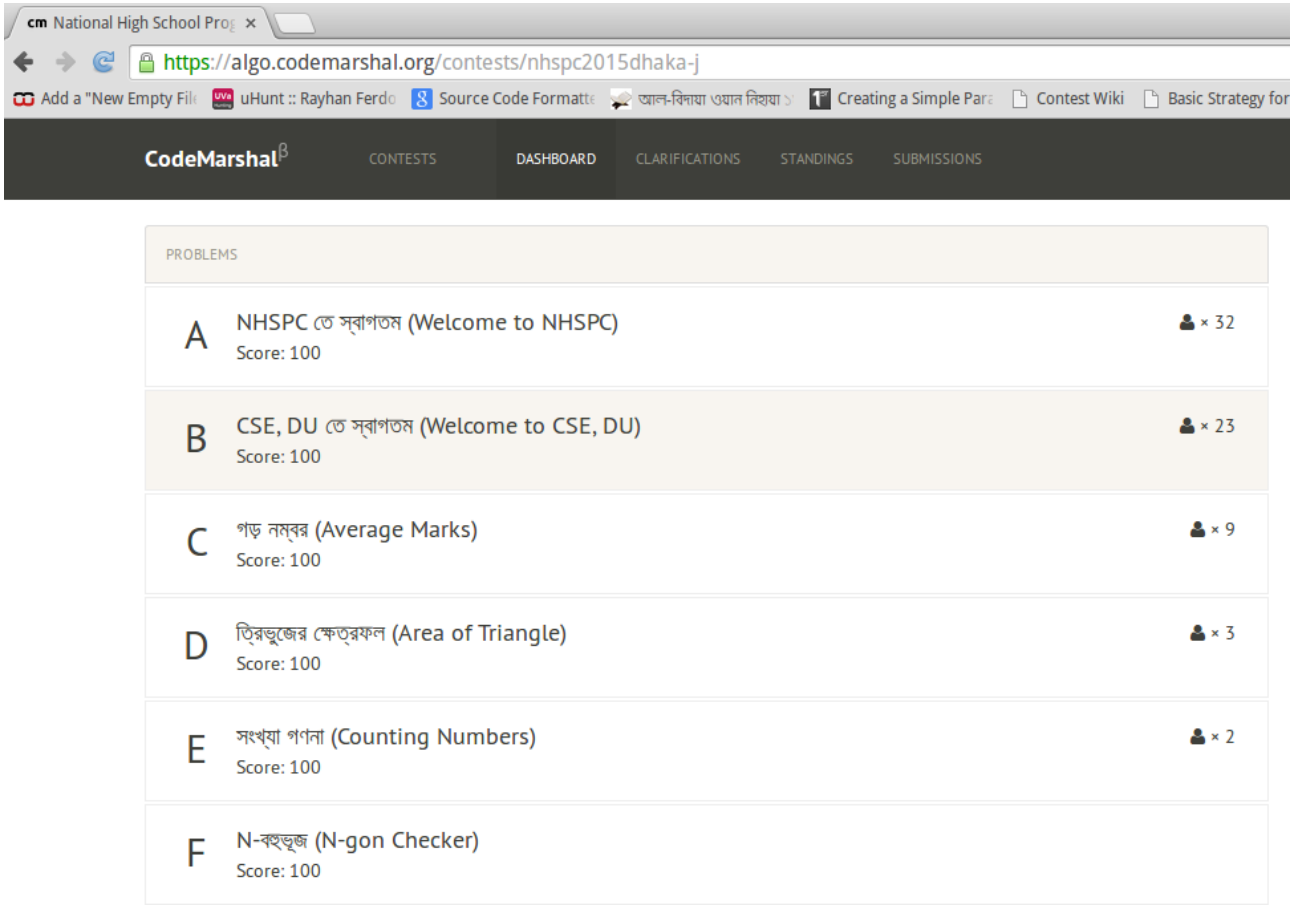
Tips and Tricks for contest

1. try to solve the easier problem first. then the harder ones. read the problems and try to understand them. you will be able to find the easier one.

you can also look over the **scoreboard/standings/dashboard** for finding the easier problems. in the standings – the problem that is solved by most of the contestants – is the easier one. and the one that is solved by the least ones or not solved yet is the harder one.



for example in this contest problem a is the easiest, problem b is second easiest, problem e and f are hardest ones.

but this trick has a fault. always you have to wait for others to solve some problems first. in the beginning of the contest you can not use this trick.

2. always use a **c++ project** to do your code. because -

- **c++ has larger data range for variables.**
- **c++ has some useful libraries.**
- **c++ also supports plain c code.**

3. when you are working with decimal numbers like – 3.1416 , 0.99001, 1.00 etc then use the data type **double** (not float). because double has higher precision and it is more accurate. but float is less accurate. so using float may sometime give wrong result.

4. only few data types are enough for contests. in contest there are 2 important matters that are mentioned in every problem. after every problem's heading you will find 2 notices called -

- **CPU / time limit** - 0.5 sec / 1 sec / 3 sec / 5 sec etc.
- **memory limit** - 32 MB / 256 MB etc.

time limit means your program must finish the execution for the judging input within the time limit.
memory limit means your program must use the RAM memory within the mentioned memory limit.

say, you declare a variable of type int. then it will allocate a memory of 4 bytes in RAM.
but the good thing is, for contest programs – the given memory limit is high enough. you don't need to think about it. all you have to think about is the time limit.
time limit can be managed by changing the way of the program (you have to learn algorithm for that and you don't need to think about it now)

so, say you need to use a variable that ranges from 0 to 100. the type int is enough for that. but you can also use a type that has higher range. for example – long long. because, though it will allocate more memory in the RAM but its not a problem.

so use the chart for selecting a variable types. you don't need to memorize the range of different data types.

category	if you are using	data type to use	format specifier
1	round number that may be positive/negative	**long long**	**%lld**
2	round number that is only positive	**unsigned long long**	**%llu**
3	floating point numbers	**double**	**%lf**
4	character	**char**	**%c**
5	round numbers that is within -30000 to +30000	**int**	**%d**

***** for category 5, any variable that ranges from -30000 to +30000 - you can also use long long type for that if you want without any headache.**

5. include this header

#include<bits/stdc++.h>

you don't need to use any other header. all headers are added automatically. the contest is using gnu gcc 4.9.2 and it should support the header.

but i am not sure that, this header is allowed in codemarshal. i will check on it. later i will inform you – if you can use it or not.

6. read problems carefully. you may not be able to solve the easiest problem not for understanding only one silly sentence.

7. print this materials and codes in the contest. they will help. you can also take a C book. it is allowed.

8. read the problems carefully and also read the output format carefully. read carefully for spaces and capital or small letters in output format. if you make mistake for a single space or anything then it will give wrong answer.