Competitive Programming

What is it?

- According to **Wikipedia** – "**Competitive programming** is a mind sport usually held over the Internet or a local network, involving participants trying to program according to provided specifications. "

- How is it recognized in the society?
  - -Google
  - -Facebook
  - -IBM
  - -DirectI
  - -Cisco
  - -TCS

HOW TO PARTICIPATE?

- 1. Create an account on your favorite online judge.
- 2. Start solving problems, participate in contests.

Q-WHICH BOOKS TO REFER FOR COMPETITVE PROGRAMMING?

Q-WHERE IS THE SYLLABUS?

HackerRank

VARIOUS OJS

Why shall I do it?

How many people do it?

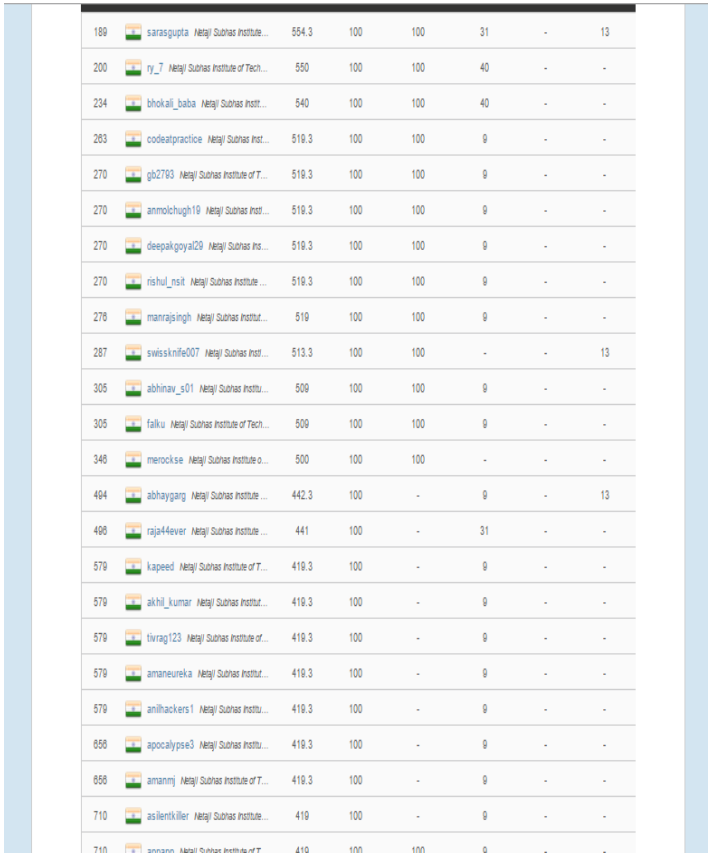
We need statistics…

Although you shouldn't do something which does not interest you, but competitive programming does help you in getting a job.

Wondering why we have sky high placements from IIT-D, NSIT and DTU and not from IGDTUW?

Pay attention to the next few slides. Mind you this is just a trailer…

STATISTICS



189	sarasgupta Netaji Subhas Institute...	554.3	100	100	31	-	13
200	ry_7 Netaji Subhas Institute of Tech...	550	100	100	40	-	-
234	bhokali_baba Netaji Subhas Instt...	540	100	100	40	-	-
263	codeatpractice Netaji Subhas Inst...	519.3	100	100	9	-	-
270	gb2793 Netaji Subhas Institute of T...	519.3	100	100	9	-	-
270	anmolchugh19 Netaji Subhas Instt...	519.3	100	100	9	-	-
270	deepakgoyal29 Netaji Subhas Ins...	519.3	100	100	9	-	-
270	rishul_nsit Netaji Subhas Institute ...	519.3	100	100	9	-	-
276	manrajsingh Netaji Subhas Institut...	519	100	100	9	-	-
287	swissknife007 Netaji Subhas Instt...	513.3	100	100	-	-	13
305	abhinav_s01 Netaji Subhas Institu...	509	100	100	9	-	-
305	falku Netaji Subhas Institute of Tech...	509	100	100	9	-	-
346	merockse Netaji Subhas Institute o...	500	100	100	-	-	-
494	abhaygarg Netaji Subhas Institute ...	442.3	100	-	9	-	13
496	raja44ever Netaji Subhas Institute ...	441	100	-	31	-	-
579	kapeed Netaji Subhas Institute of T...	419.3	100	-	9	-	-
579	akhil_kumar Netaji Subhas Institut...	419.3	100	-	9	-	-
579	tivrag123 Netaji Subhas Institute of...	419.3	100	-	9	-	-
579	amaneureka Netaji Subhas Institut...	419.3	100	-	9	-	-
579	anilhackers1 Netaji Subhas Institu...	419.3	100	-	9	-	-
656	apocalypse3 Netaji Subhas Institu...	419.3	100	-	9	-	-
656	amanmj Netaji Subhas Institute of T...	419.3	100	-	9	-	-
710	asilentkiller Netaji Subhas Institute...	419	100	-	9	-	-

NSIT, the list is so long to fit enough here

58	Rishit_Sanmukhani I...	600	100	-	100	100	100	100
58	yash_15 Indian Institut...	600	100	-	100	100	100	100
154	jtnydv25 Indian Institut...	520	100	-	100	20	100	100
160	aniket_0956 Indian In...	500	-	-	100	100	100	-
285	sahil1997 Indian Instit...	430	100	-	100	-	100	100
327	tapasjain01 Indian Inst...	400	100	-	-	100	-	100
327	pravkulk Indian Institut...	400	100	-	100	-	100	100
327	monni_suresh Indian I...	400	100	-	100	-	100	100
327	kauts_kanu Indian Inst...	400						
327	akashtanwar096 Indi...	400						
327	g1s3_3 Indian Institute ...	400						
327	anmol21 Indian Institut...	400						
697	sjindal995 Indian Instit...	325						

1233	ananyagoel95 Indian ...	225	25	-	100	-	100	-
1233	ra1ra03_3134 Indian I...	225	25	-	100	-	100	-
1233	prakhar_gupta Indian ...	225	25	-	100	-	100	-
1233	jeetur7 Indian Institute ...	225	25	-	100	-	100	-
1233	ankit784 Indian Institut...	225	25	-	100	-	100	-
1233	akshit_85 Indian Institu...	225	25	-	100	-	100	-
1530	anpkhandelwal9 Indi...	220	-	-	100	20	100	-
1565	praneet__1 Indian Inst...	200	-	-	100	-	100	-

2758	mahdihusain Indian In...	100	-	-	-	-	100	-
2758	halberdier Indian Instit...	100	-	-	-	-	-	100
2758	h1r1313s Indian Institu...	100	-	-	-	-	100	-
2758	priyam123 Indian Instit...	100	-	-	100	-	-	-
2758	kryptomaniac Indian I...	100	-	-	-	-	100	-
2758	gpa79 Indian Institute o...	100	-	-	-	-	-	100
2758	mt10589 Indian Institut...	100	-	-	-	-	100	-
2758	lance1lance2 Indian I...	100	-	-	-	-	100	-
2758	kartikeyag Indian Instit...	100	-	-	-	-	100	-
2758	wolfishman Indian Insti...	100	-	-	100	-	-	-
2758	an1234 Indian Institute...	100	-	-	-	-	100	-

100	-	100	-
100	-	100	-
100	-	100	-
100	-	100	-

IIT DELHI, again a long list

160	dhruvchadha De...	500	100	-	100	100	100	100	-
160	ravi0213 Delhi Te...	500	100	-	100	100	100	100	-
160	kaspers Delhi Tec...	500	100	-	100	100	100	100	-
233	uhateme Delhi Te...	480	100	-	100	50	100	100	30
240	shubhamrawat ...	450	100	-	100	50	100	100	-
279	archit_jain08 Del...	440	100	-	100	-	100	100	40
327	aakash201 Delhi...	400	100	-	100	-	100	100	-
327	bhrigu Delhi Tech...	400	100	-	100	-	100	100	-
327	decoders15 Delh...	400	100	-	100	-	100	100	
327	naivedya Delhi T...	400	100	-	100	-	100	100	
327	dhruvagga Delhi ...	400	100	-	100	-	100	100	
327	gautambathla D...	400	100	-	100	-	100	100	
327	codezhunter Del...	400	100	-	100	-	100	100	

1217	pppppppp Delhi T...	230	25	-	100	-	100	5
1217	ankur_dhir95 De...	230	25	-	100	-	100	5
1234	beshamberc Del...	225	25	-	100	-	100	-
1234	ash_k Delhi Tech...	225	25	-	-	-	100	100
1234	pranav9 Delhi Te...	225	25	-	100	-	100	-
1234	saurabhrathi00 ...	225	25	-	100	-	100	-
1234	parth_coded Del...	225	25	-	100	-	100	-
1234	guneet_khosla ...	225	25	-	100	-	100	-
1234	humblefool_2 D...	225	25	-	100	-	100	-
1535	rishu97kr Delhi T...	215	-	-	100	-	100	-

1567	dreamplay Delhi ...	200	-	-	100	-	100
1567	ajaydtu Delhi Tec...	200	-	-	100	-	100
1567	shubhamkhara ...	200	-	-	100	-	100
1567	indiantarget Delh...	200	-	-	100	-	100
1567	daxlab Delhi Tech...	200	-	-	100	-	100
1567	Shreymanik Delh...	200	-	-	100	-	100
1567	akshay_dtu Delhi...	200	-	-	100	-	100
1567	ysajjan81 Delhi T...	200	-	-	100	-	100
1567	sjha77 Delhi Tech...	200	-	-	100	-	100
2262	kunaal21 Delhi T...	175	25	-	50	-	100
2262	namz Delhi Techn...	175	25	-	50	-	100

DTU, nothing new

#	USER NAME	SCORE	COVERING	LSTGRPH	MOSTDIST	BRACKETS	PETERSEN
662	maane018 *Indira Gandhi Delhi Tech...*	1 - (0)	-	-	-	1 - (0)	-
959	charubansal12 *Indira Gandhi Delhi ...*	1 - (0)	-	-	-	1 - (0)	-
1109	codegirl1995 *Indira Gandhi Delhi Te...*	1 - (1)	-	-	-	1 - (1)	-
1240	ayushigupta11 *Indira Gandhi Delhi T...*	1 - (0)	-	-	-	1 - (0)	-
1269	pari25gupta *Indira Gandhi Delhi Tec...*	1 - (0)	-	-	-	1 - (0)	-
1399	megha_agg007 *Indira Gandhi Delhi ...*	1 - (5)	-	-	-	1 - (5)	-

Our very own, IGDTUW

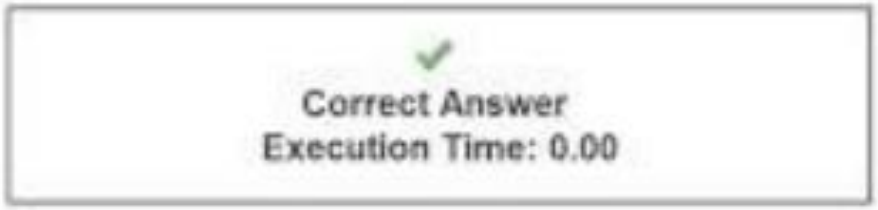
CODEBENDERS

CodeChef Campus Chapter- IGDTUW

```
#include<stdio.h>

int main()
{
        printf("Hello World");
        return 0;
}
```

HAPPINESS IS



GETTING A GREEN TICK

Who are we?

Why we started?

We are social

- Facebook page: facebook.com/CodeBenders (2k+ likes)
- Facebook group: facebook.com/groups/igdtuwCodeChef/
- Twitter: twitter.com/codebenders
- Google group (Forum): groups.google.com/forum/#!forum/codebenders-updates
- Quora: quora.com/CodeBenders
- Blog: http://codebenderscb.blogspot.in/
- Reach us on Gmail: igdtuwcodebenders@gmail.com

ACM- ICPC

- The ACM- ICPC is considered as the "Olympics of Programming Competitions".
- The contest participants come from over 2,000 universities that are spread across 80 countries and six continents.
- In terms of prize money, the top team takes home $12,000 along with the ACM ICPC 2014 Gold medal. Three other teams getting Gold Medal are awarded $6,000. Each Silver Medal team gets $3,000 and each Bronze Medal team is awarded $1,500.
- And more important than all, the winners also get some **super bragging rights and job offers from some of the top software companies in the world**!

Some success stories

Anudeep nekkanti- how a guy from a not-so-famous engineering college gets to work at google zurich.

1. Start with an OJ
2. Practice as much as you can, learn what you don't know, practice that everyday. Keep trying
3. Solved 300 problems in 3 months.
4. Prepares for ICPC
5. Gets a decent rank there.
6. Gets a referral ,interviews with Google many times(many times not because of rejection but his desire to work at Zurich)
7. ZURICH IT IS. :D

- Name- Gennady Korotkevich, Belarus
- Among the youngest coders who compete with people with phd degrees, red on topcoder.
- Participates in any programming contest, emerges a winner, spoils the contest since he is not eligible to participate in some due to his age(now old enough)
- The world knows who he is, yeah, nothing less than a star.

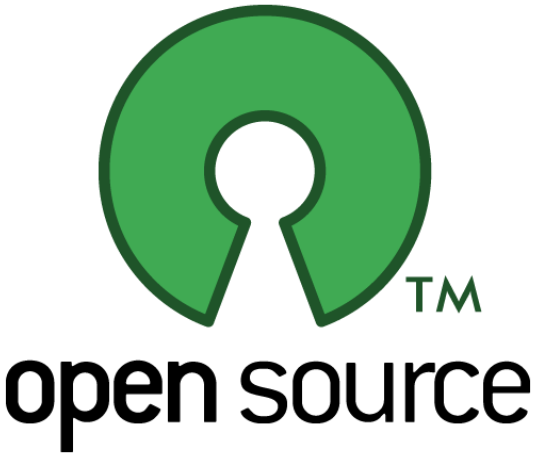
Hackathons

Hack + Marathon

- What are Hackathons?
- How to participate?
- Why participate?

Types of Hackathons

- For an application type
- Using a specific programming language, API, or framework
- For a cause or purpose
- For a demographic group
- Internal company hackathons



Open source

Computer software with its source code made available with a license in which the copyright holder provides the rights to study, change, and distribute the software to anyone and for any purpose.

- What do you mean by Open Source?
- How to contribute?
- Why contribute?

Some Famous Open Source Projects

- LINUX
- UBUNTU
- MySql
- Firefox
- Apache
- WordPress

How do I start with open source?

Select an organization. Go on their wiki.

Look for the technology your selected organization is using.

Clone the source code.

Get Started.

Some information for the newbies

- GNOME has GnomeLove
- Linux Kernel has Linux Kernel Newbies
- Mozilla has whatcanidoformozilla.org

Stuck? What to do?

- Read blogs.
- Read tutorials.
- Ping the contributors.
- Ask on IRC. Lurk on their IRC Channels.
- Ask. Do not hesitate.

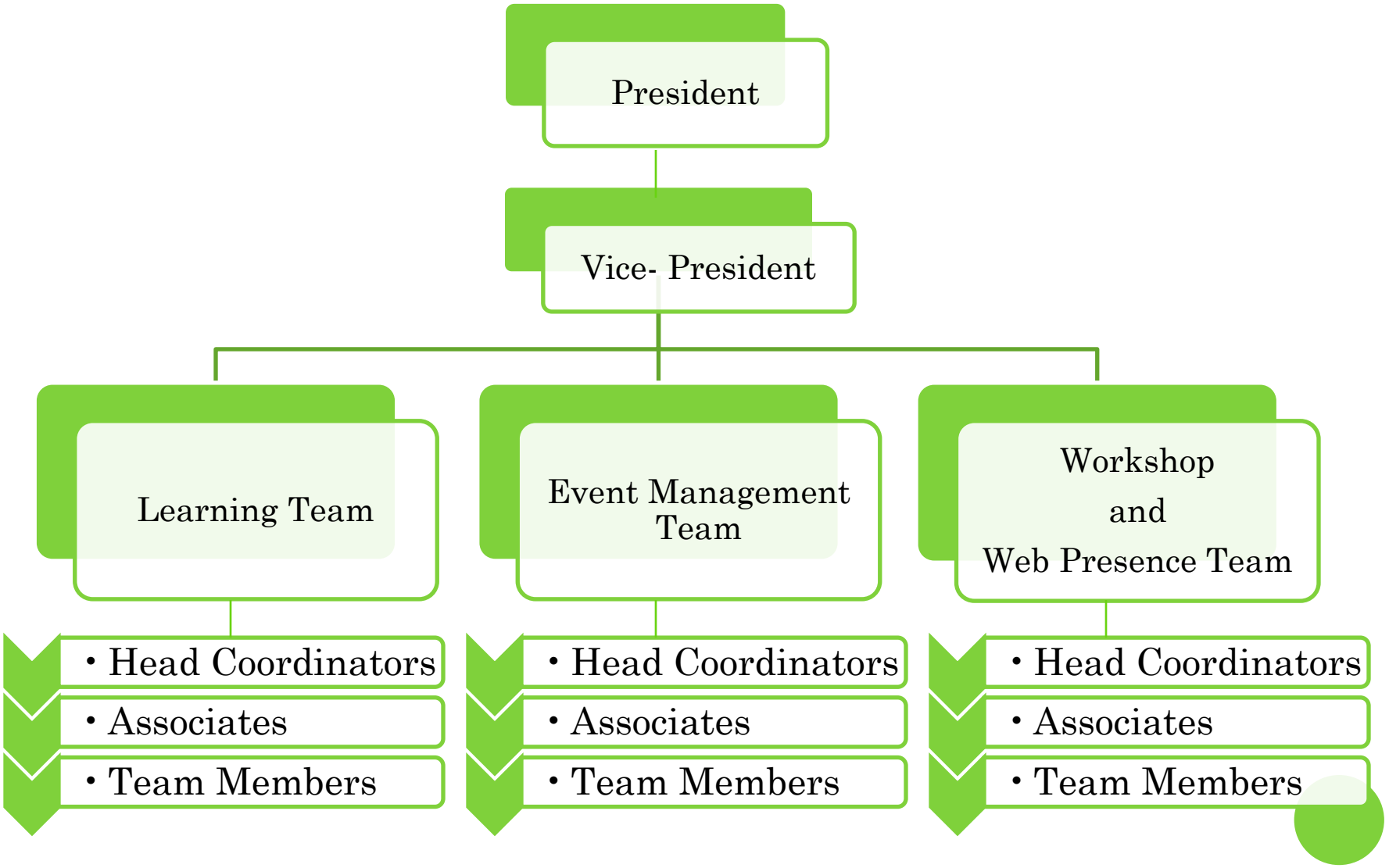
DOs for contributing to open source

- Add yourself to their mailing list.
- Ask questions.
- Read the wikis properly, before asking any question. Most has awesome help and wiki pages.
- Lurk on the IRC channels.
- Read Blogs.
- Be honest.
- Learn if you don't know, but you are interested in.

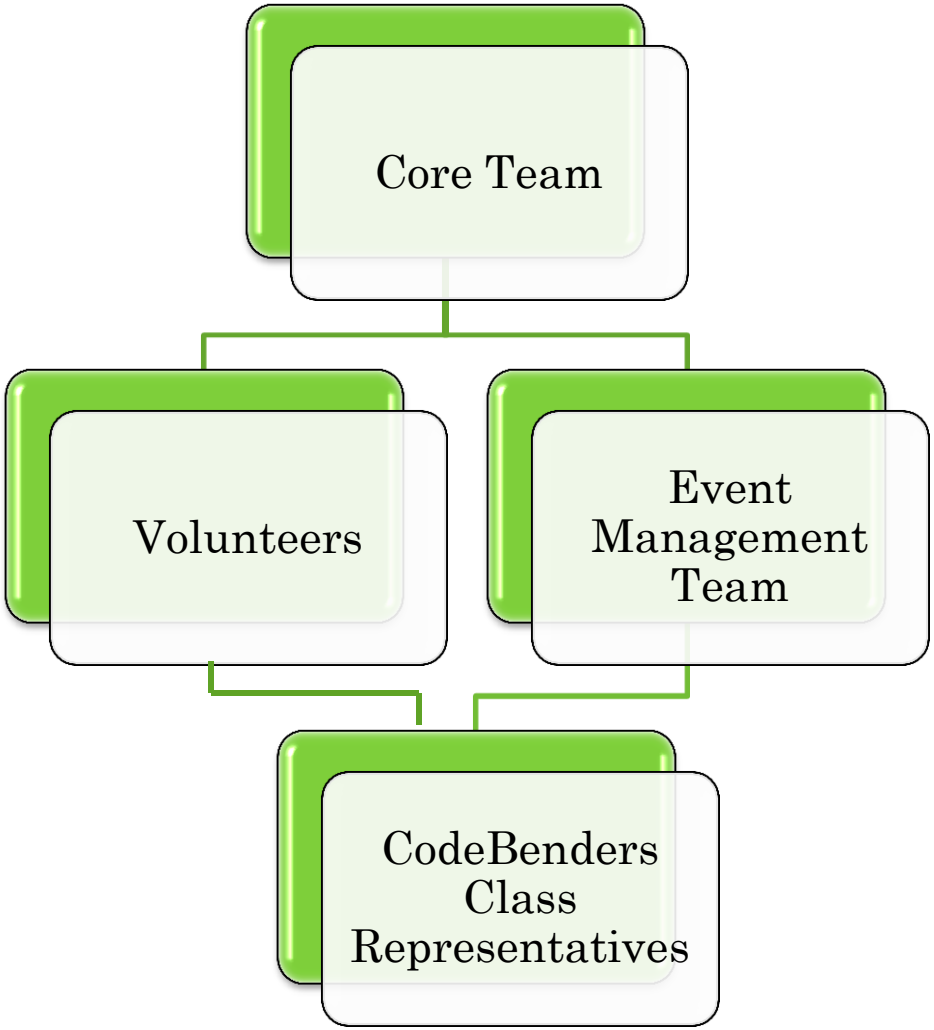
DON'Ts FOR CONTRIBUTING TO OPEN SOURCE

- Do not act.
- Do not show off.
- Do not lie while asking for help.
- Do not sit the assumption that you won't be able to learn X.
- Do not turn your internet and your mind off!
- Obviously do not abuse, if you didn't get the help you expected.

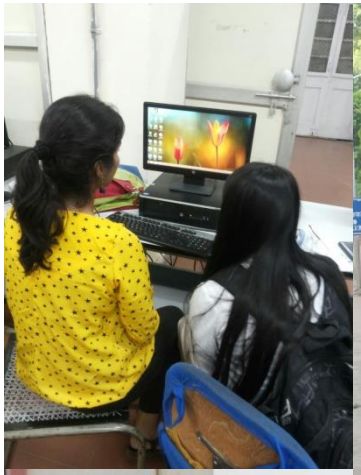
CodeBenders Team 2014- 15



Introducing CodeBenders Team Structure 2015- 16



CodeBenders- Event (CodeQuest)



Questions?

He who asks a question is a fool for five minutes; he who does not ask a question remains a fool forever.