

# PC^2 Guide

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### Pre-Requisites:-

- Lan Connection among PCS
- GNU g++ compiler on every pc
- Jdk installed on every pc

## Installing GNU g++ compiler:

First check if the PC already g++ compiler installed in it by using command

“g++ -v” on command prompt.

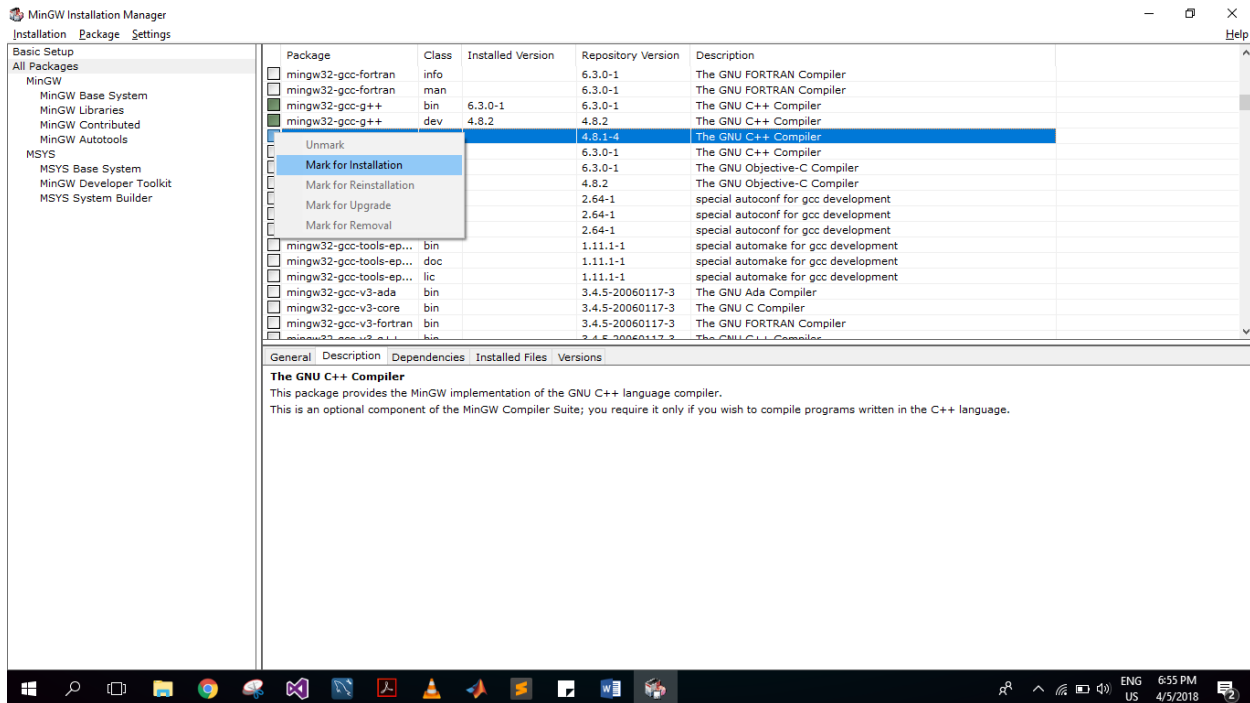
Steps:

1. Press WinKey + R.
2. Type “cmd” and click on OK button.
3. Command Prompt will be opened Type “g++ -v”
4. If its installed it will show text given in the pic below

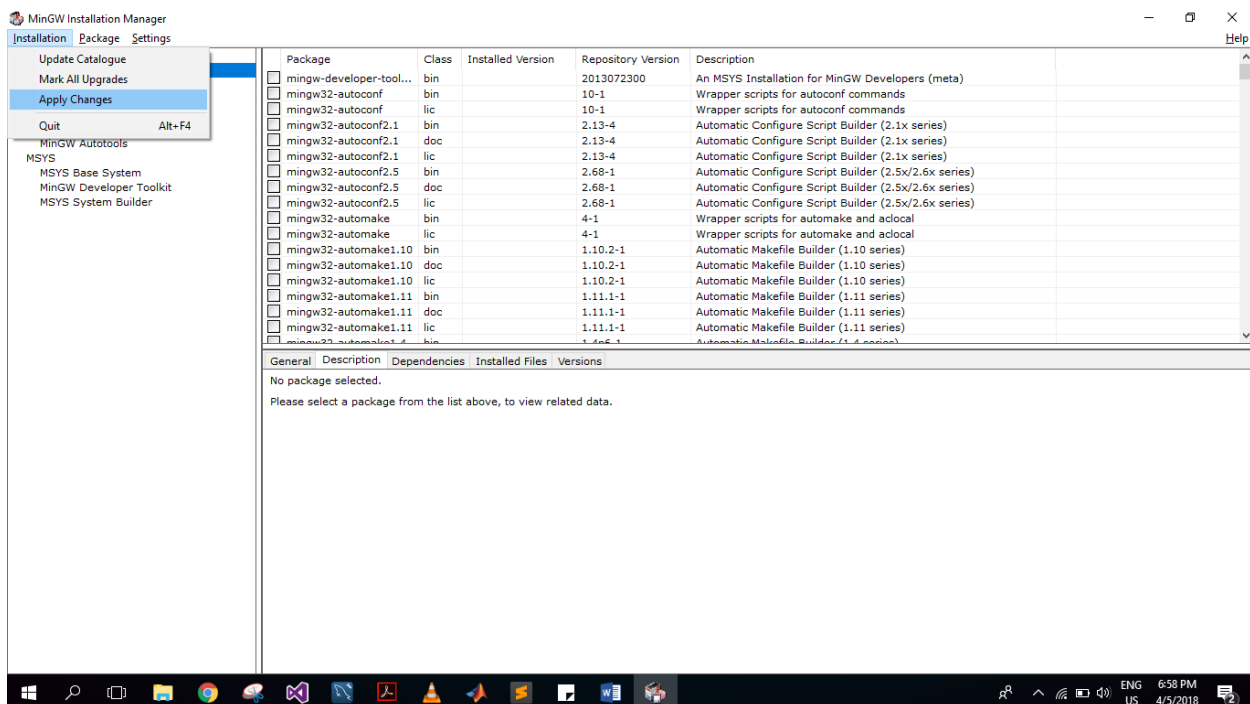
```
C:\Users\Memona Sultan>g++ -v
Using built-in specs.
COLLECT_GCC=g++
COLLECT_LTO_WRAPPER=c:/mingw/bin/./libexec/gcc/mingw32/6.3.0/lto-wrapper.exe
Target: mingw32
Configured with: ../src/gcc-6.3.0/configure --build=x86_64-pc-linux-gnu --host=mingw32 --with-gmp=/mingw --with-mpfr=/mi
ngw --with-mpc=/mingw --with-isl=/mingw --prefix=/mingw --disable-win32-registry --target=mingw32 --with-arch=i586 --ena
ble-languages=c,c++,objc,obj-c++,fortran,ada --with-pkgversion='MinGW.org GCC-6.3.0-1' --enable-static --enable-shared --
enable-threads --with-dwarf2 --disable-sjlj-exceptions --enable-version-specific-runtime-libs --with-libiconv-prefix=/m
ingw --with-libintl-prefix=/mingw --enable-libstdcxx-debug --with-tune=generic --enable-libgomp --disable-libvtv --enabl
e-nls
Thread model: win32
gcc version 6.3.0 (MinGW.org GCC-6.3.0-1)
```

It will tell the version of install g++ compiler in the system. Otherwise it will give error like “g++ is not any external or internal command”.

If g++ is not present then download and install the latest version of **MinGw** from <https://sourceforge.net/projects/mingw-w64/> Once the installer is downloaded, run it and you will see a window like the image shown below. Now right click on all packets named as “mingw32-gcc-g++” and click on **Mark For Installaton**.

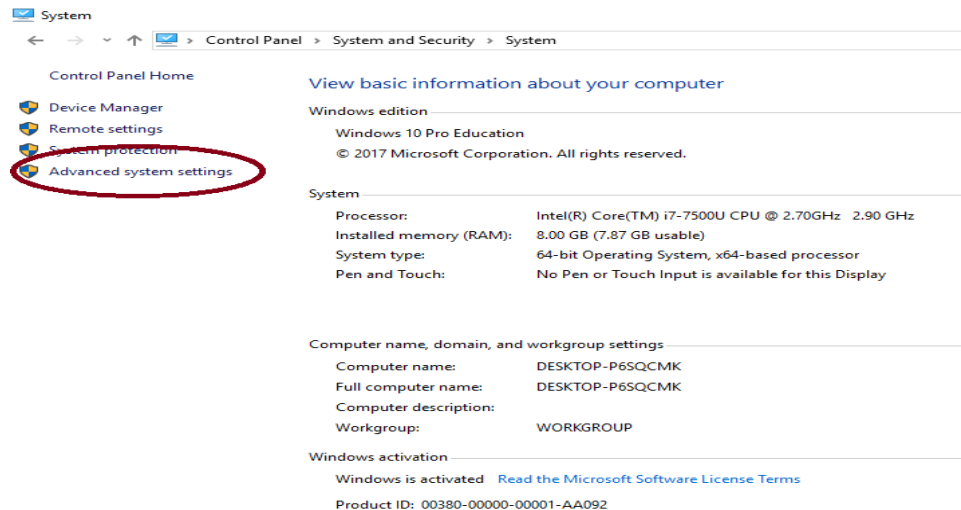


After this go to **Installation->Apply Changes** a dialog box will appear click on **Apply** button .

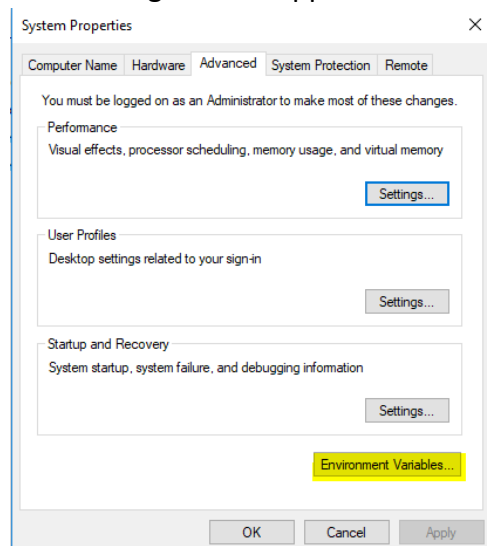


## Inserting Path to environment Variables:-

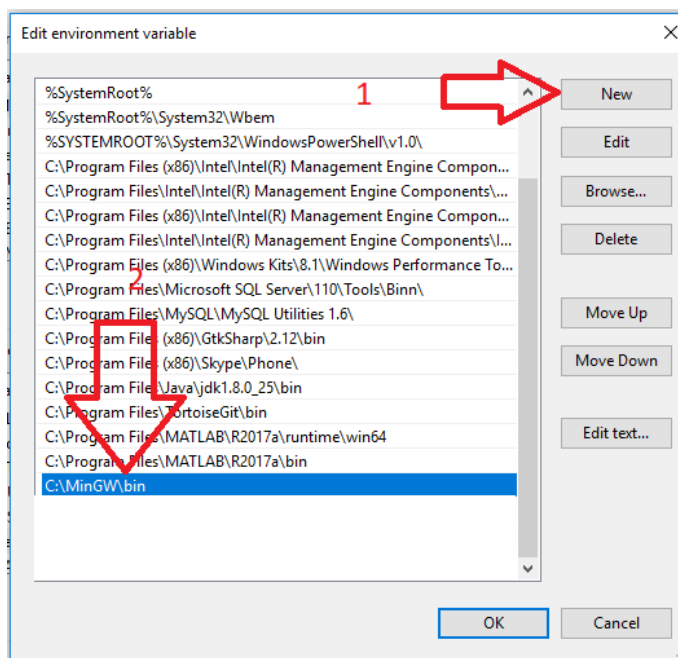
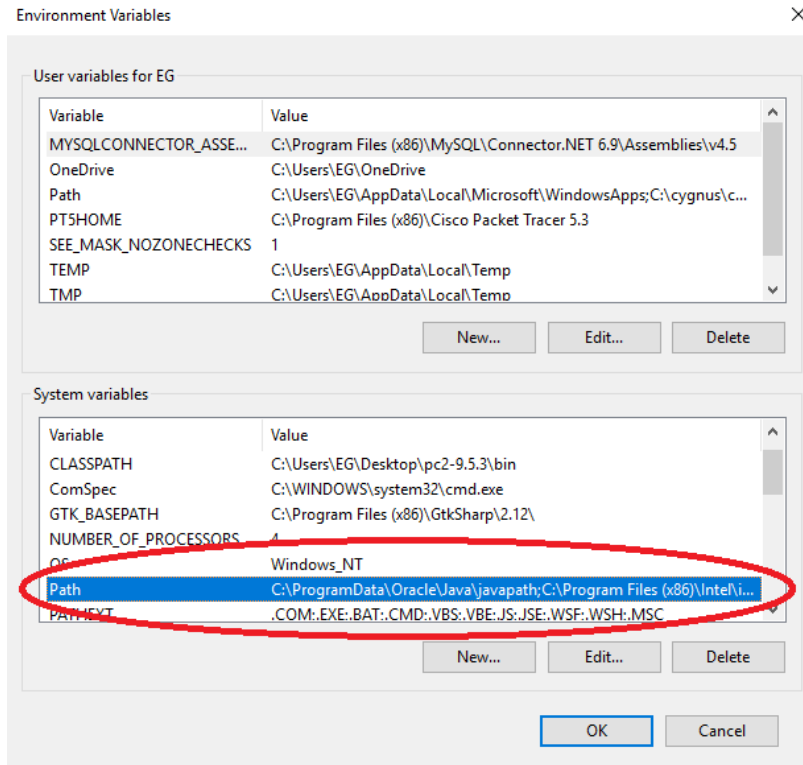
- Once the installation is completed Goto “C:\MinGW\bin” (Or wherever you installed the MinGw) copy this *path* and go to “Control Panel->System and Security->System”
- Click on **Advanced System Settings** from left window.



- A dialog box will appear the click on **Environment Variables** as shown in image

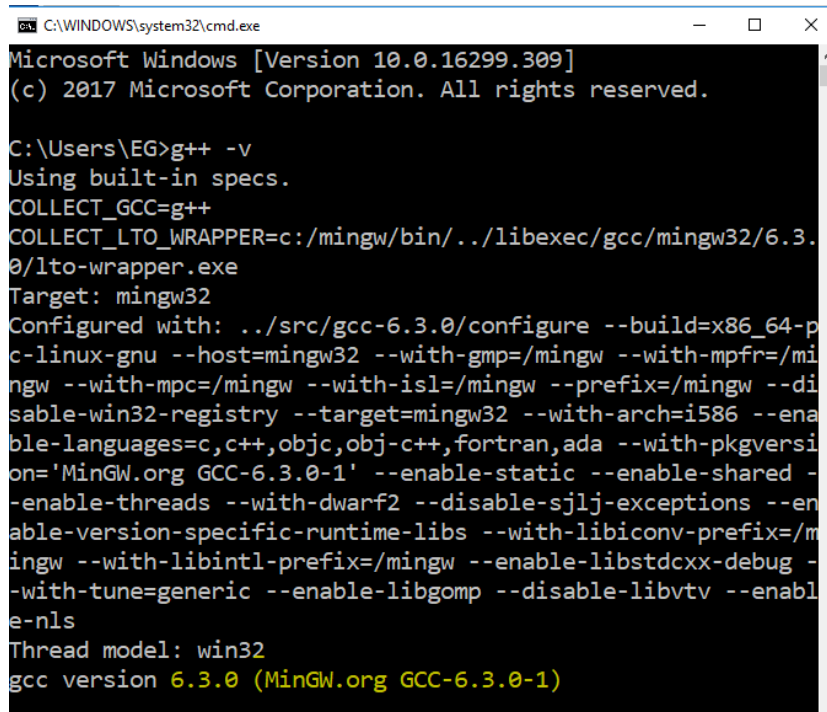


- Find “**Path**” in System variable, click on **Edit** Button and add the copied directory-path into system path variables as shown below



- Click **OK** . Now verify installation via command “**g++ -v**” in command prompt.

- The following image shows the details of the execution of command in *success* scenario.
- The highlighted text in Yellow color shows the version of g++ compiler.



```

C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.16299.309]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\EG>g++ -v
Using built-in specs.
COLLECT_GCC=g++
COLLECT_LTO_WRAPPER=c:/mingw/bin/./libexec/gcc/mingw32/6.3.0/lto-wrapper.exe
Target: mingw32
Configured with: ../src/gcc-6.3.0/configure --build=x86_64-pc-linux-gnu --host=mingw32 --with-gmp=/mingw --with-mpfr=/mingw --with-mpc=/mingw --with-isl=/mingw --prefix=/mingw --disable-win32-registry --target=mingw32 --with-arch=i586 --enable-languages=c,c++,objc,obj-c++,fortran,ada --with-pkgversion='MinGW.org GCC-6.3.0-1' --enable-static --enable-shared --enable-threads --with-dwarf2 --disable-sjlj-exceptions --enable-version-specific-runtime-libs --with-libiconv-prefix=/mingw --with-libintl-prefix=/mingw --enable-libstdcxx-debug --with-tune=generic --enable-libgomp --disable-libvtv --enable-nls
Thread model: win32
gcc version 6.3.0 (MinGW.org GCC-6.3.0-1)

```

- **Note:** If the error “g++ not recognized as internal or external command” is displayed then repeat the steps again carefully.

## Installing JDK:

First check if the PC already has JDK installed in it by using command

“**Java -version**” in command prompt.

If its already installed it will show you these texts

```

C:\WINDOWS\system32\cmd.exe

Microsoft Windows [Version 10.0.16299.309]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Memona Sultan>java -version
java version "1.8.0_25"
Java(TM) SE Runtime Environment (build 1.8.0_25-b18)
Java HotSpot(TM) 64-Bit Server VM (build 25.25-b02, mixed mode)

C:\Users\Memona Sultan>

```

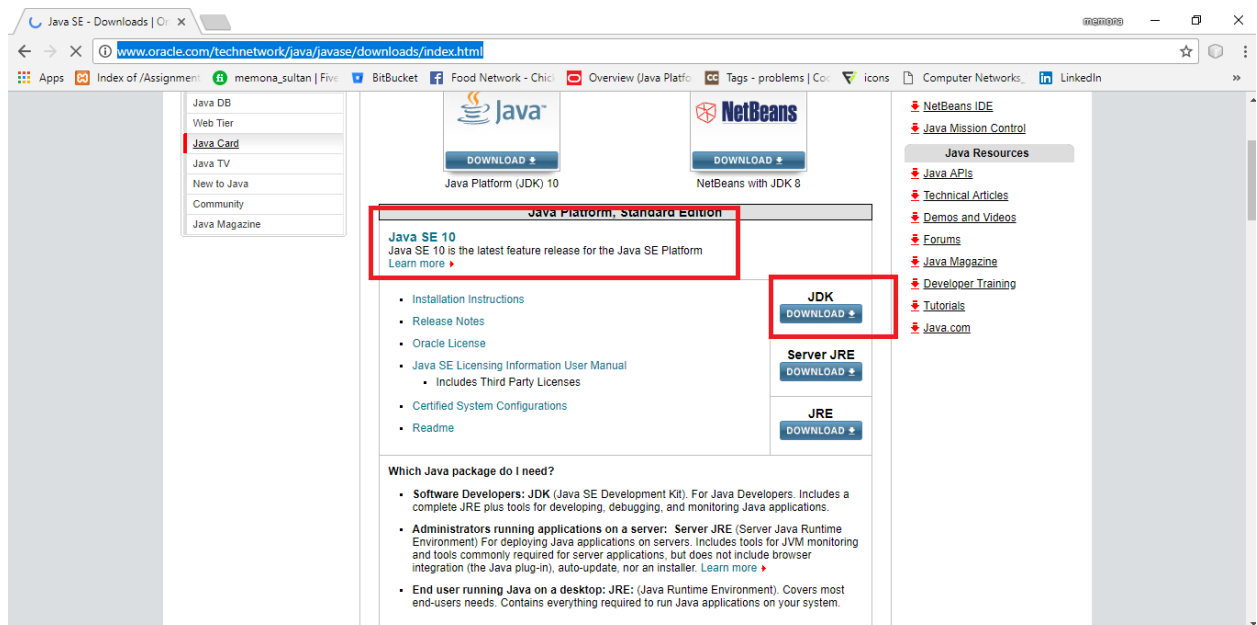
Yellow arrow showing the version of JDK.

**Note:** You need jdk version **1.7+** for using pc2 software.

1. if the version is below 1.7 then reinstall the jdk from the following link.

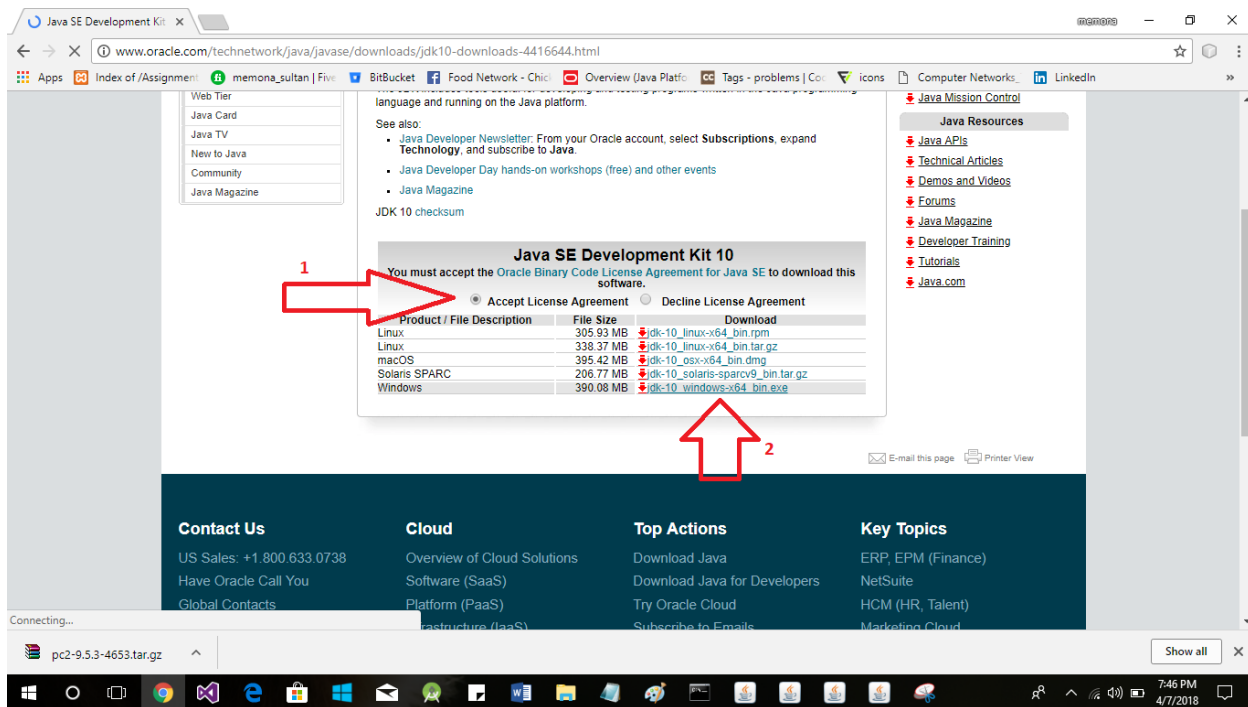
<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

2. Press download for latest version of JDK.



Following page will be opened after clicking download



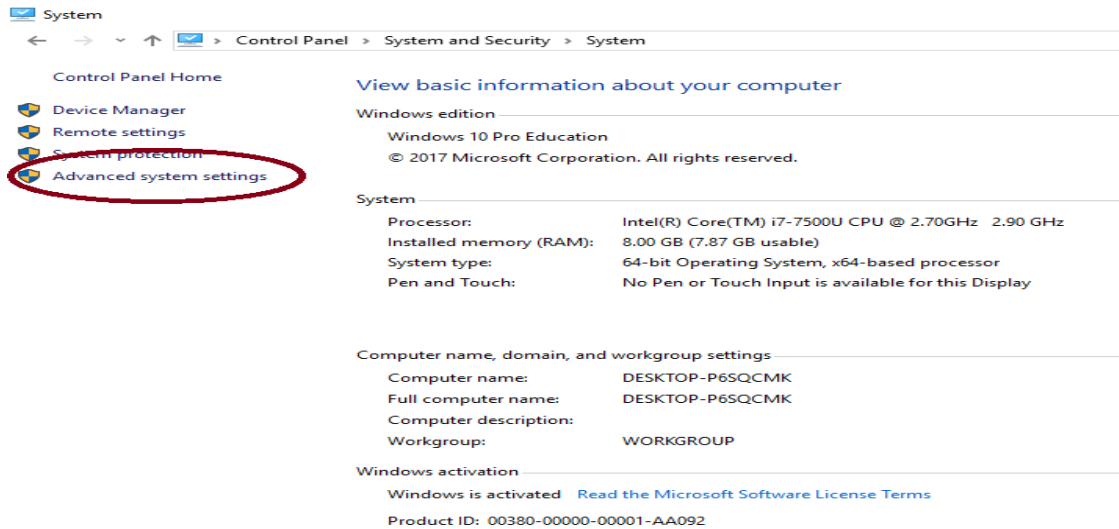


1. Select **Accept License Agreement**
2. Select appropriate platform
3. Download will be started after that.
4. After complete download you have to install the jdk.

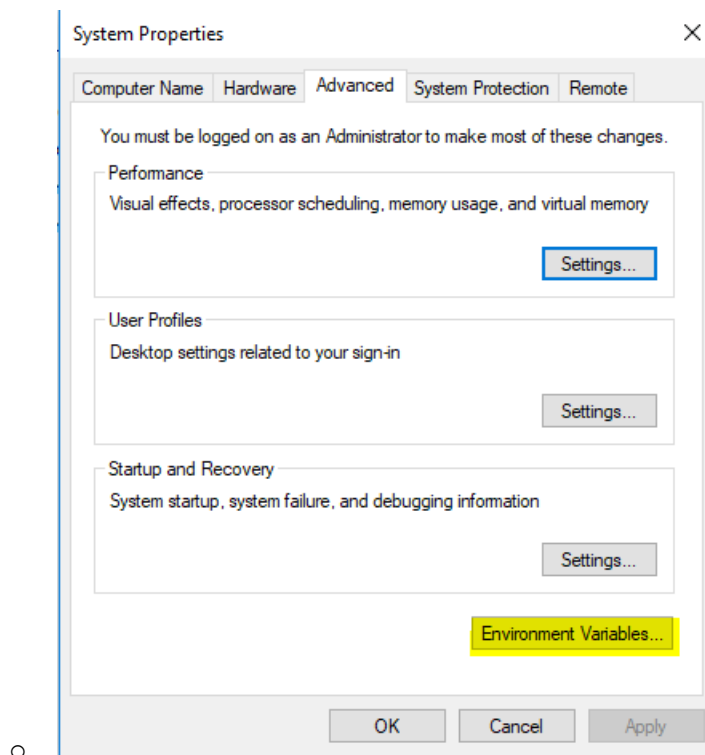
And then set its **bin path** in Environment variables path like you already have set the MIngw\bin path.  
(Steps mentioned above)

## Downloading , Installing PC^2

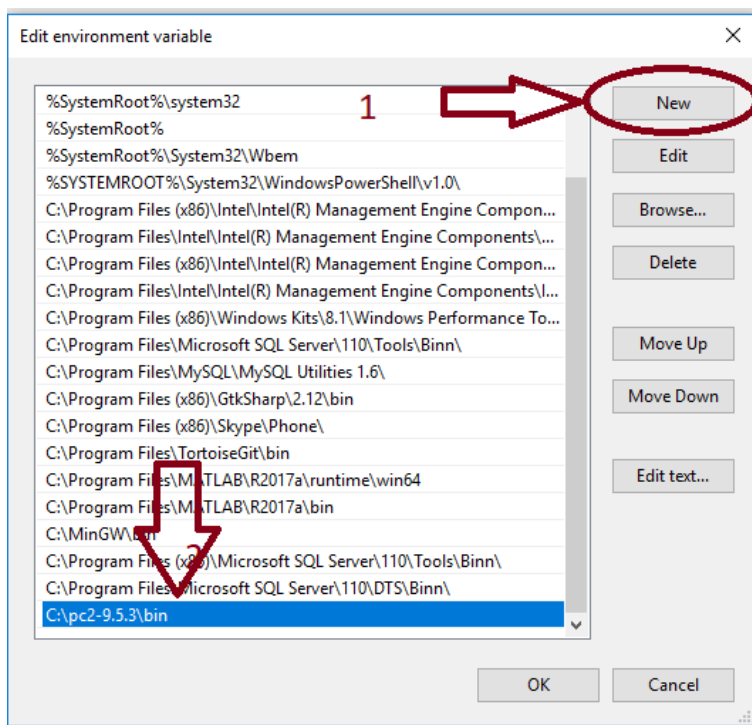
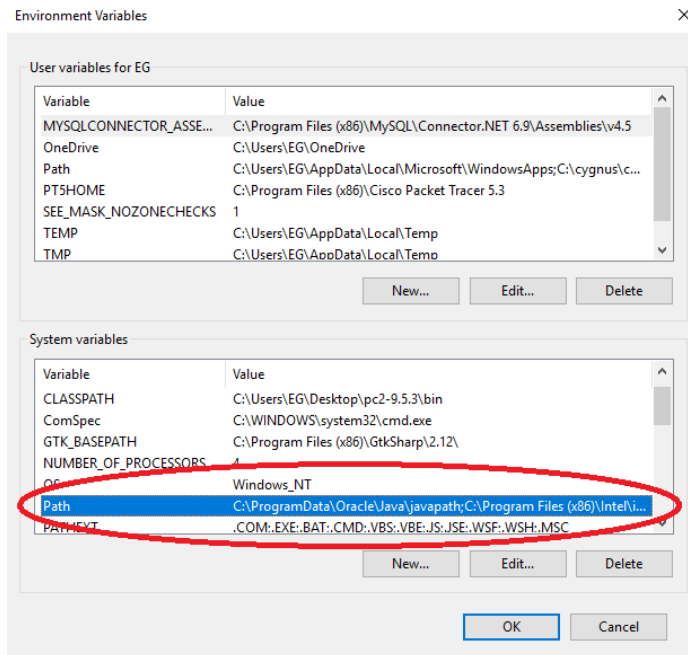
- Download the latest PC2 version from <https://pc2.ecs.csus.edu> also download the PC^2 admin guide form <https://pc2.ecs.csus.edu/pc2docs.html>
- After downloading it copy the **pc2-9.5.3** ( or any lates version name) in each PC on the LAN in **C:\** drive.
- Now open "**C:\pc2-9.5.3\bin**" and give this directory path to **System Path variables** by going in **Control Panel->System and Security->System**
- Click on **Advanced System Settings** from left window.



1. A dialog box will appear the click on **Environment Variables** as shown in image



- Find **“Path”** in System variable, click on **Edit** Button and add the copied directory-path into system path variables as shown below



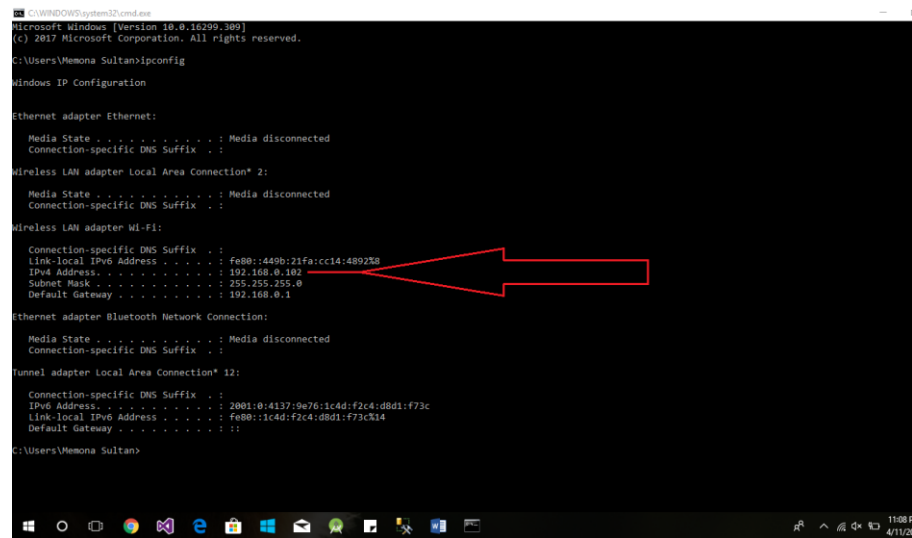
- Click **OK**.
- Repeat these step on each PC on the Network
- **NOTE : IF you don't copy this path correctly PC2 won't run on your PC.**

## Selecting A server

- Choose an appropriate PC with 4gb+ RAM to make it server.
- Note down its IP address.

Note: In case if you don't know how to see IP address of any PC.

1. Press winKey+R
2. Type "cmd" and press run button
3. Command prompt will be opened.
4. In command prompt ; write command "**ipconfig**" and press enter
5. Following window will be opened.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.16299.309]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Memona Sultan>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

   Media State . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

   Media State . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::1449b:21fa:cc14:489258
   IPv4 Address. . . . . : 192.168.0.102
   Subnet Mask . . . . . : 255.255.255.0
   Default Gateway . . . . . : 192.168.0.1

Ethernet adapter Bluetooth Network Connection:

   Media State . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Tunnel adapter Local Area Connection* 12:

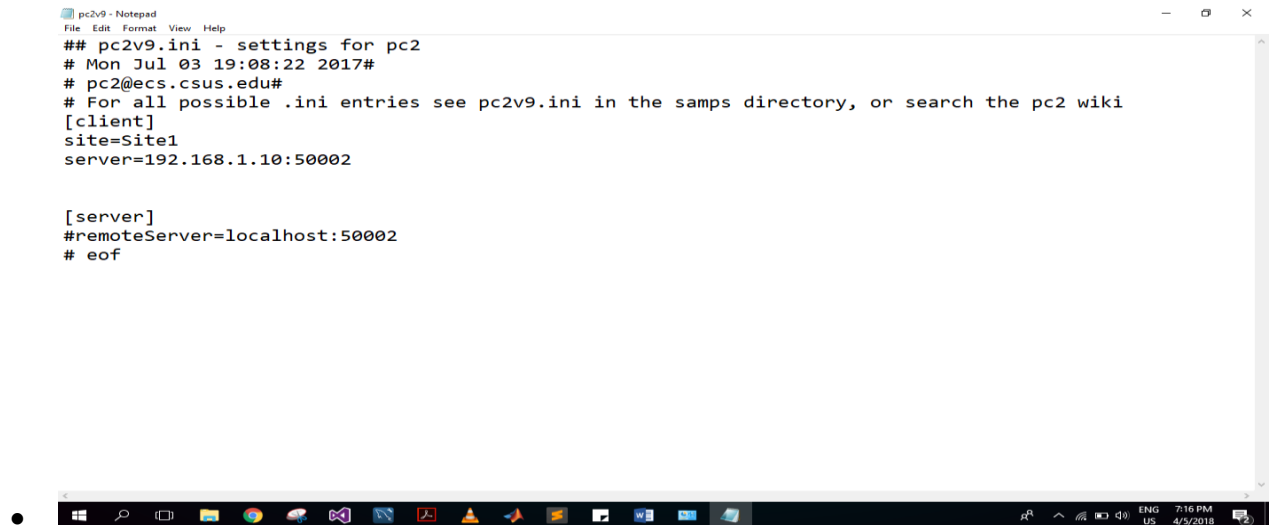
   Connection-specific DNS Suffix  . :
   IPv6 Address. . . . . : 2001::4137:9e76:1c4d:f2c4:d8d1:f73c
   Link-local IPv6 Address . . . . . : fe80::1c4d:f2c4:d8d1:f73c14
   Default Gateway . . . . . : ::

C:\Users\Memona Sultan>
```

And the ipv4 Address is your PC's **IP Address**

Note it down its your server address!

- Then Go to **C:\pc2-9.5.3\bin** Folder and look for **pc2v9.ini** file and open it
- It should look like in the picture shown below (if not write these lines in file)



```
## pc2v9.ini - settings for pc2
# Mon Jul 03 19:08:22 2017#
# pc2@ecs.csus.edu#
# For all possible .ini entries see pc2v9.ini in the samps directory, or search the pc2 wiki
[client]
site=Site1
server=192.168.1.10:50002

[server]
#remoteServer=localhost:50002
# eof
```

- Give IP address (of that PC which you've chosen to make server) in this file  
**server=*your selected PC Ip*:50002**
- For Example : In the image shown above I have set the IP as *192.168.1.10* as it was the IP address of my selected server PC.
- Now save and copy this file and paste it in **C:\pc2-9.5.3\bin** In all other PCs in which pc2 will be used.

# Pc2 User Guide

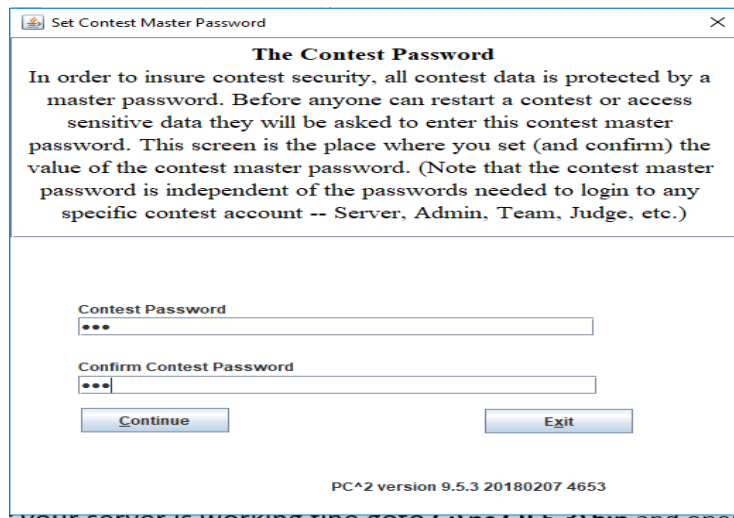
## 1 Starting Server

### 1.1 - Setting password

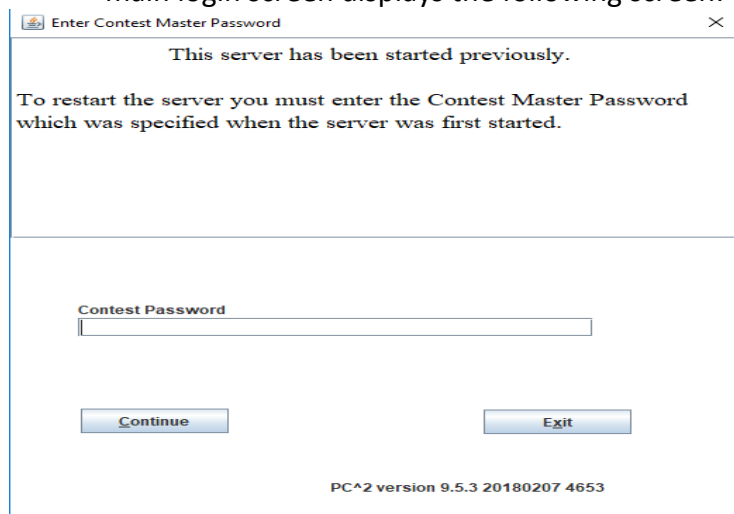
- Go to **C:\pc2-9.5.3\bin** and Open the file **pc2server** (which is window batch file) following window will be opened
- login using default credentials
  - User Name = **site1**
  - Password = **site1**



- Set a password for your contest for security purpose
- *This password provides access to all contest-related data; it should be well-chosen and well-protected. Note also that there is no default value for this password; it must be set (chosen and confirmed) by the Contest Administrator. Entering and confirming a contest master password (in addition to the login ID and login password) completes the login process.*



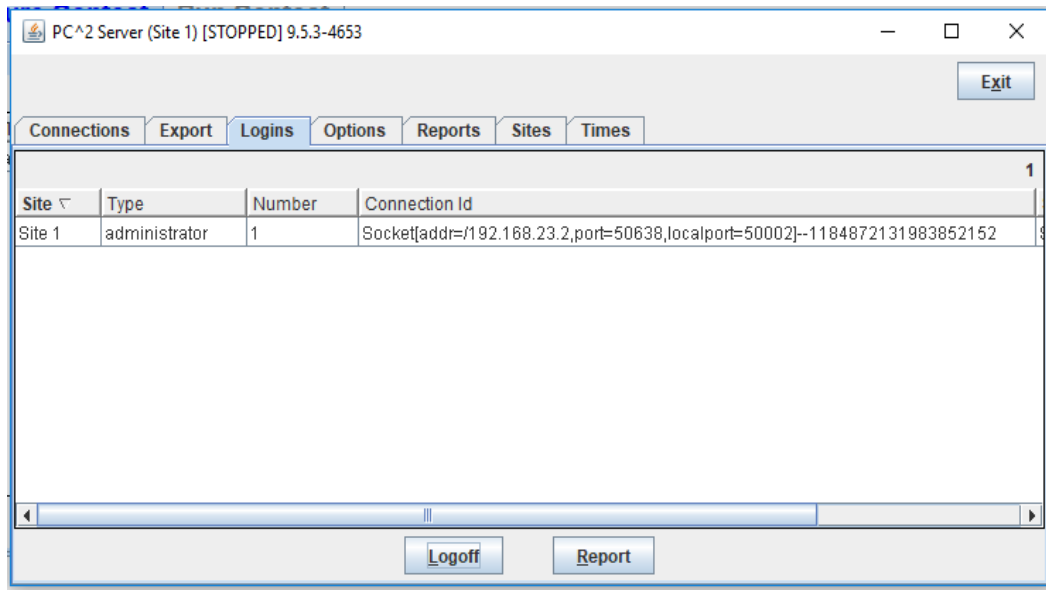
- If a site server is started again at some later point in time (i.e. after a contest master password has been set), pressing the Login button on the server's main login screen displays the following screen:



- Enter the password you set earlier and click on **Continue**

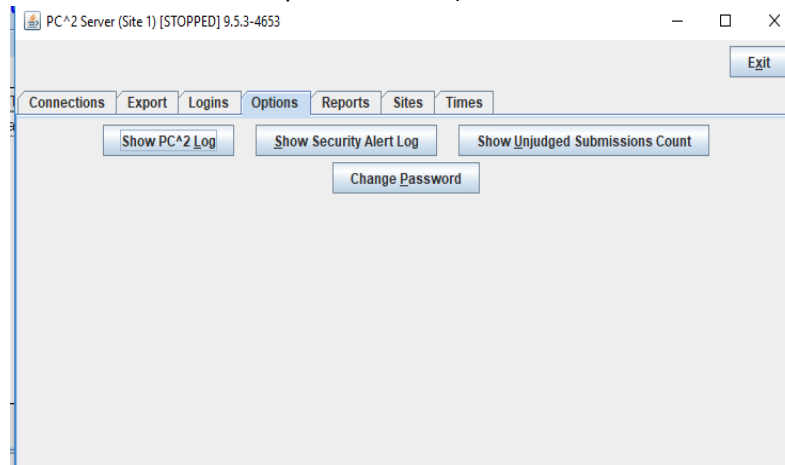
## 1.2 - Login and Connections

- After Logging in the following screen will be shown with different tabs
- The **Logins and connection** tabs are pretty much same giving the information about the logged in IDs in the running contest. You can *LogOff* any user's id via **LogOff** button



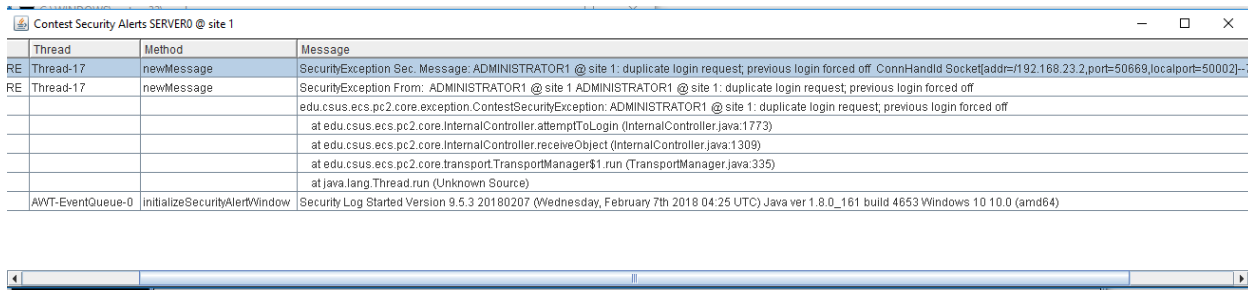
### 1.3 - Options

This tab contains different options which are pretty much simple. The **PC^2 Log** button will display all the details of little actions performed in the contest. Via **Change password** you can change the password of the server. **Show Security Alert Log** is most useful here which displays the logs of security violations (i.e *opening same id on 2 or more different PCs at the same time as shown in picture below* )



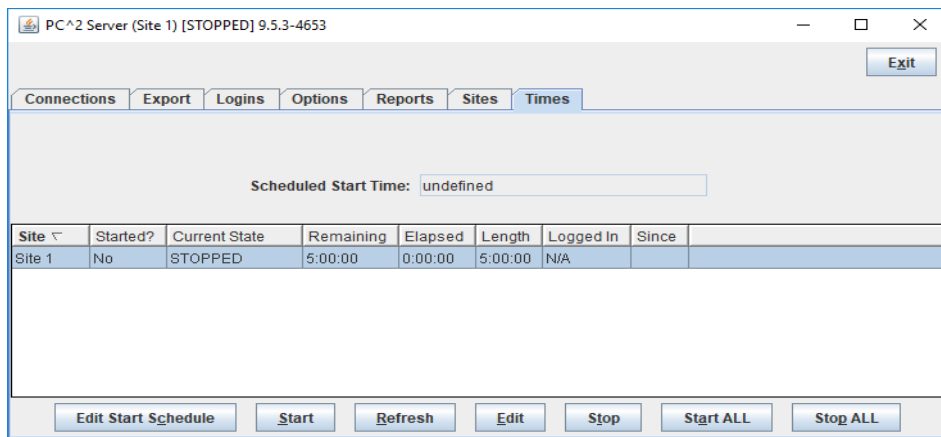
This image here is showing the duplicate id login violation with the IP address of the victim machine. Moreover it also **terminates** the session of the old user



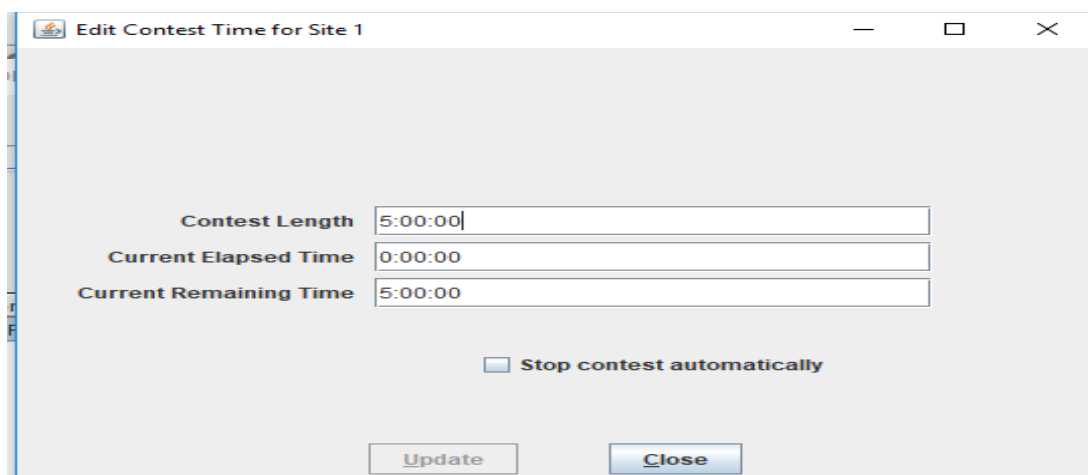


## 1.4 - Times

This allows us to set the duration of our contest. We can **stop/start** contest according to your needs. By default timer is set to five hours to change this click on **Edit** button.



On clicking **Edit** button dialog box will appear like shown in image below. Fill the fields according to HH:MM:SS format to set the time and click **UPDATE** button.



After setting up the Time you can click on **Start** button according to your requirements and your contest will be started.

## 1.5 – Verification

To verify if the server is running fine goto **C:\pc2-9.5.3\bin** and open **pc2admin** if the following dialog box occurs with error message on it (as highlighted) then Your server is not configured properly due the following reasons

- Wrong server IP in the **pc2v9.ini** file
- Disconnection of the PC in the LAN network
- The server machine is not running and logged in via the **pc2server**

Note: Run and login via **pc2server** file before verification



If this error message is not displayed you are good to go.

## 2 Administrator Login

### 2.1 Logging in

Open **pc2admin** file and login via default username: *root* and password: *administrator1*. You will see the following screen with multiple tabs on it. In this Groups/ICPC/import Config/Notifications/Reports tabs are not relevant to LAN based contests So you should ignore these tabs.

PC^2 ADMINISTRATOR 1 (Site 1) [STOPPED] 9.5.3-4653

5:00:00 Exit

**Configure Contest** **Run Contest**

Accounts Auto Judge Groups ICPC Import Config Judgements Languages Notifications Problems Profiles Reports Settings Times

Site ▾	Type	Account Id	Display Name	Group	Alias
Site 1	team	39	team39		
Site 1	team	38	team38		
Site 1	team	37	team37		
Site 1	team	36	team36		
Site 1	team	35	team35		
Site 1	team	34	team34		
Site 1	team	33	team33		
Site 1	team	32	team32		
Site 1	team	31	team31		
Site 1	team	30	team30		
Site 1	team	9	team9		
Site 1	team	8	team8		

Generate Add Edit Filter Load Save

## 2.2 - Accounts

First you must generate accounts for the contest by clicking on **Generate** button in the accounts tab. A dialog box will appear. Enter the required count for the logins and click on **Generate Account for site 1** button. Your accounts will be generated

Note: You must generate atleast 1 judge account. Don't create any admin account as it is already created by default which will be enough for a LAN contest.

Generate Accounts

Site Site 1 (Site 1, This Site) ▾

Administrators (1)

Judges (2)

Teams (40)

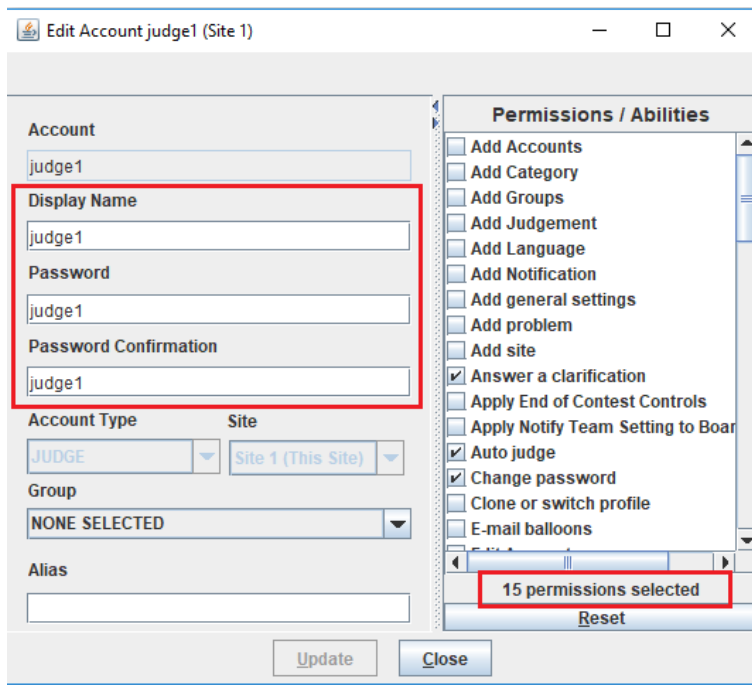
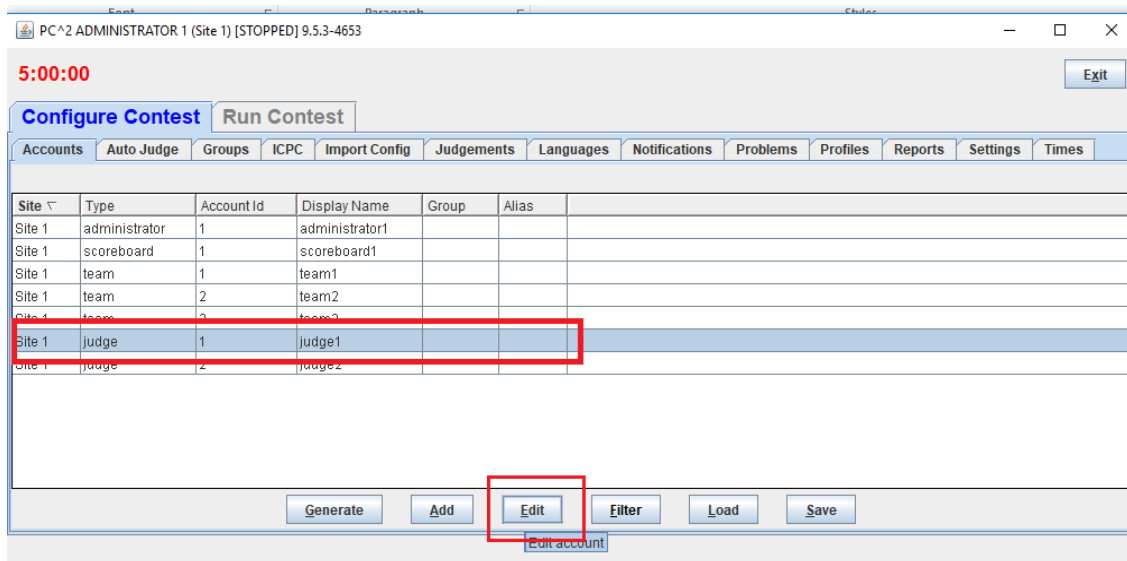
Scoreboards (1)

FEEDER ▾ (0)

Start Account Number at

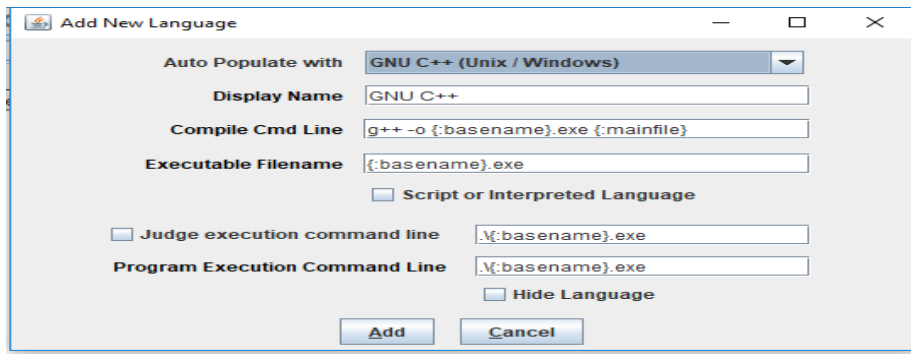
Generate Accounts for Site 1 Cancel

Once accounts are generated you can edit the information of each account( i:e password/login /display name etc) by clicking on **EDIT** button. It also allows you to add/remove permissions for accounts. As shown in the images below.



## 2.3 - Setting Languages

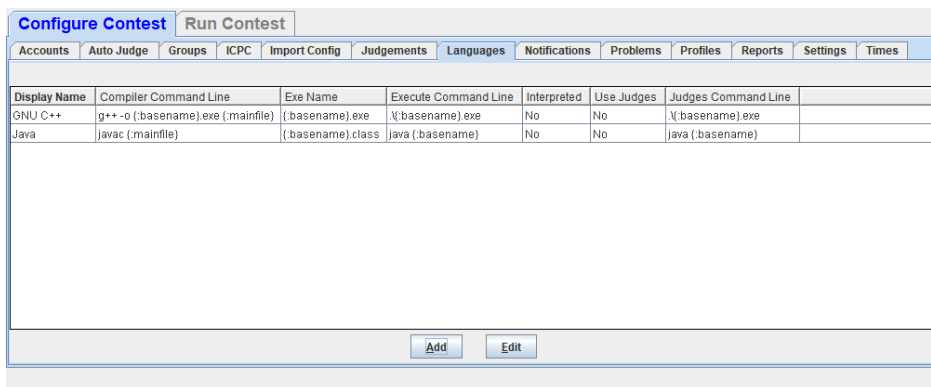
To set languages for your contest go to Language tab and click on **Add** button. The following dialog box will appear. Select a language from **Auto Populate with** drop down and click on **Add** button.



The 'Add New Language' dialog box contains the following fields and options:

- Auto Populate with:** GNU C++ (Unix / Windows) (dropdown menu)
- Display Name:** GNU C++ (text field)
- Compile Cmd Line:** g++ -o {;basename}.exe {;mainfile} (text field)
- Executable Filename:** {;basename}.exe (text field)
- ☐ **Script or Interpreted Language**
- ☐ **Judge execution command line** (text field containing {;basename}.exe)
- Program Execution Command Line:** {;basename}.exe (text field)
- ☐ **Hide Language**
- Add** and **Cancel** buttons at the bottom.

Your language will be added and will be listed in **languages** tab as shown below.



The 'Configure Contest' window shows the 'Languages' tab with the following table:

Display Name	Compiler Command Line	Exe Name	Execute Command Line	Interpreted	Use Judges	Judges Command Line
GNU C++	g++ -o {;basename}.exe {;mainfile}	{;basename}.exe	{;basename}.exe	No	No	{;basename}.exe
Java	javac {;mainfile}	{;basename}.class	java {;basename}	No	No	java {;basename}

At the bottom of the table are **Add** and **Edit** buttons.

## 2.4 Setting Problems

Go to **Problems** tab and click on **ADD** button the following dialog box will appear. Tick mark the **Problem Requires Input Data** and **Judges Have provided Answer File** checkbox. Provide the relevant data for the problems by Following the steps shown in image then proceed to next tab **Judging Type**.

The screenshot shows the 'Add New Problem' dialog box with the 'General' tab selected. The following fields and options are visible:

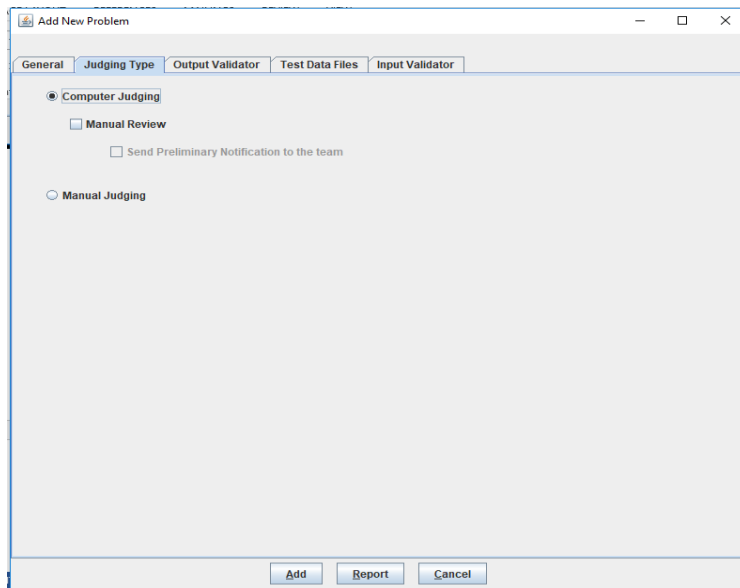
- Problem name:** Road Paths (Annotation: Name to be displayed to all)
- Run Timeout Limit (Secs):** 3 (Annotation: Time Limit in seconds for the problem)
- Short Name:** p1 (Annotation: optional Name only for admin)
- ☒ **Problem Requires Input Data**
- Team Reads From:** File (selected), Stdin (Annotation: Input method for problem)
- Input Data File:** E:\Shaheryar Data\Code Falcons\PC2 for lab\Sample Pr... (Annotation: Input file for the problem)
- ☒ **Judges Have Provided Answer File**
- Answer File:** E:\Shaheryar Data\Code Falcons\PC2 for lab\Sample Pr... (Annotation: .txt file containing the ouptut of problem)
- ☒ **Show the output window**
- ☐ **Hide Problem** (Annotation: Optional feature to hide the problem for contestants)
- ☒ **Show Compare**

Buttons at the bottom: Add, Report, Cancel.

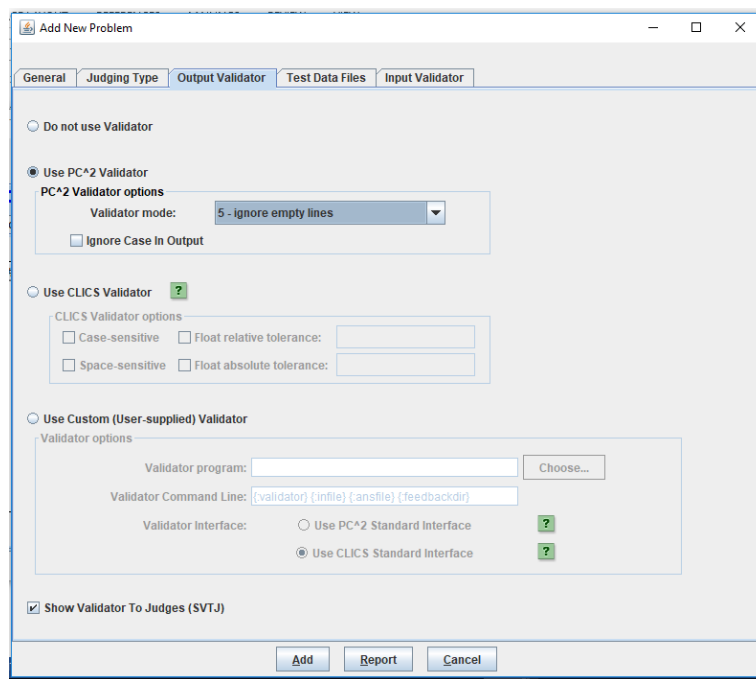
On the **Judging Type** tab the following screen will be shown with 2 different judging types.

- 1.** Computer Judging
- 2.** Manual judging

Manual judging is not recommended at all if you have provided the input/output files. So check mark *Computer judging* and don't tick mark on *Manual Review*. Manual Review will combine both automatic and manual judging which is not recommended at all. After this click on **Output Validator** Tab.

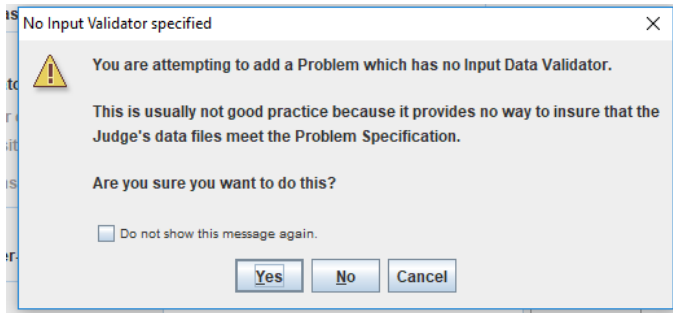


Checkmark **Use PC<sup>2</sup> Validator** option and select a validator from dropdown menu. The *ignore empty lines* validator is recommended and works fine for most of the problems. Leave everything as it is as shown on the screen . After setting Validator click on **ADD** button.

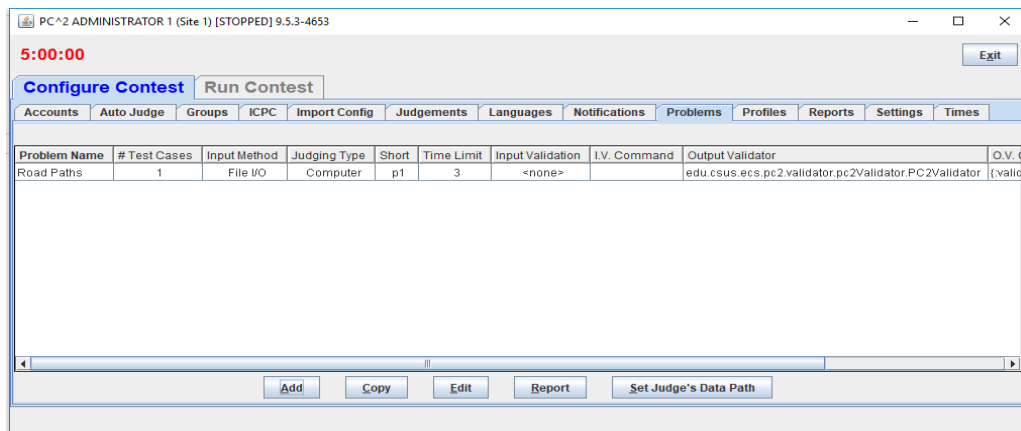


On clicking **Add** button following dialog box will appear. Click on **Yes** and proceed.

Note: If you click on **No** the problem will demand an input validator (which is not for LAN event) and will not be added.

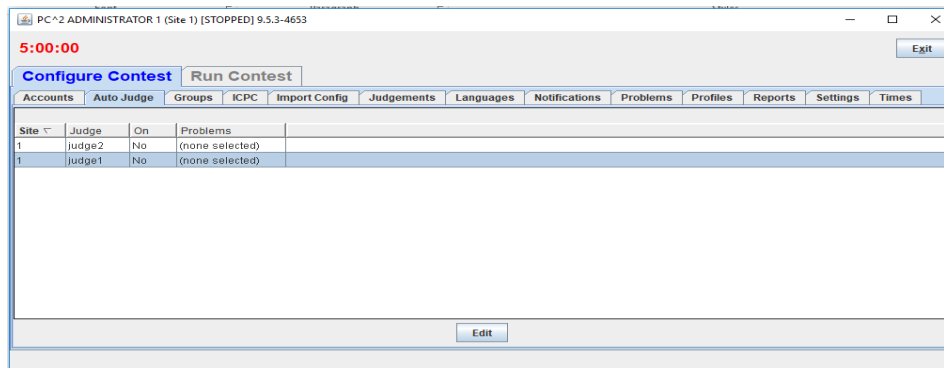


After adding problem it will be shown in the list under the **Problems** tab as shown in image.



## 2.5 Enabling Auto judge

Go to **Auto Judge** and select the judge for which you want to enable auto judging and click **Edit**.



On clicking edit following dialog box will appear. Checkmark **Enable Auto Judging** checkbox and also tick mark the checkbox against each Problem to enable auto judging for problems and click on **Update**. The checkboxes to mark are highlighted in the image below.

**Note :** If auto judging is not enabled for any judge then auto judge will not work. Judges have to manually check all the solution ( which is not recommended).



Problem	Judging Type
Road Paths	Computer

☒ Enable Auto Judging

Update Cancel

## 2.6 Run Contest

The **Run Contest** tab will display the following screen in which *Connections/Export/Logins/options/Reports/Sites* are same as **pc2server**. The *Standings/Standings HTML* are discussed in **scoreboard** section and *Clarifications/runs* will be discussed in **Judges** section.

5:00:00 Exit

Configure Contest Run Contest

Connections Clarifications Export Finalize Logins Options Reports Runs Sites Standings Standings HTML Team Status

Site	Type	Number	Connection Id	Since
Site 1	administrator	1	FauxSite1ADMINISTRATOR1 @ site 1-3405037911339679283	Sat Apr 07 13:04:31 PKT 2018

Logoff Report

After setting up these You can start contest from **Configure Contest/Times** tab OR **Times** Tab of **pc2server**.

### 3. Edit any account permissions & settings

Well as u know you have generated the accounts in step **2.2** from **Admin login**

Generate Accounts

Site: Site 1 (Site 1, This Site)

Administrators (1):

**Judges (2): 2**

Teams (40): 40

Scoreboards (1): 1

FEEDER (0):

Start Account Number at:

Generate Accounts for Site 1 Cancel

PC^2 ADMINISTRATOR 1 (Site 1) [STOPPED] 9.5.3-4653

5:00:00 Exit

Configure Contest Run Contest

Accounts Auto Judge Groups ICPC Import Config Judgements Languages Notifications Problems Profiles Reports Settings Times

Site	Type	Account Id	Display Name	Group	Alias
Site 1	administrator	1	administrator1		
Site 1	scoreboard	1	scoreboard1		
Site 1	team	1	team1		
Site 1	team	2	team2		
Site 1	team	3	team3		
Site 1	judge	1	judge1		
Site 1	judge	2	judge2		

Generate Add **Edit** Filter Load Save

Edit account

From here we know that we've generated 2 ids for judges whose login information you can see by **selecting it** and **click on Edit**.

The following window will be opened

**Edit Account judge1 (Site 1)**

**Account**

Account: judge1

Display Name: judge1

Password: judge1

Password Confirmation: judge1

Account Type: JUDGE

Site: Site 1 (This Site)

Group: NONE SELECTED

Alias:

**Permissions / Abilities**

- ☐ Add Accounts
- ☐ Add Category
- ☐ Add Groups
- ☐ Add Judgement
- ☐ Add Language
- ☐ Add Notification
- ☐ Add general settings
- ☐ Add problem
- ☐ Add site
- ☒ Answer a clarification
- ☐ Apply End of Contest Controls
- ☐ Apply Notify Team Setting to Board
- ☒ Auto judge
- ☒ Change password
- ☐ Clone or switch profile
- ☐ E-mail balloons

15 permissions selected

Reset

Update Close

From here you can see the **Account & password** of that particular id and from here you can **change the display name , Account & password** + you can also see the **permissions** which are given by default. You can also change the permissions by checking and unchecking the checkboxes given in **Permission/Abilities** tab.

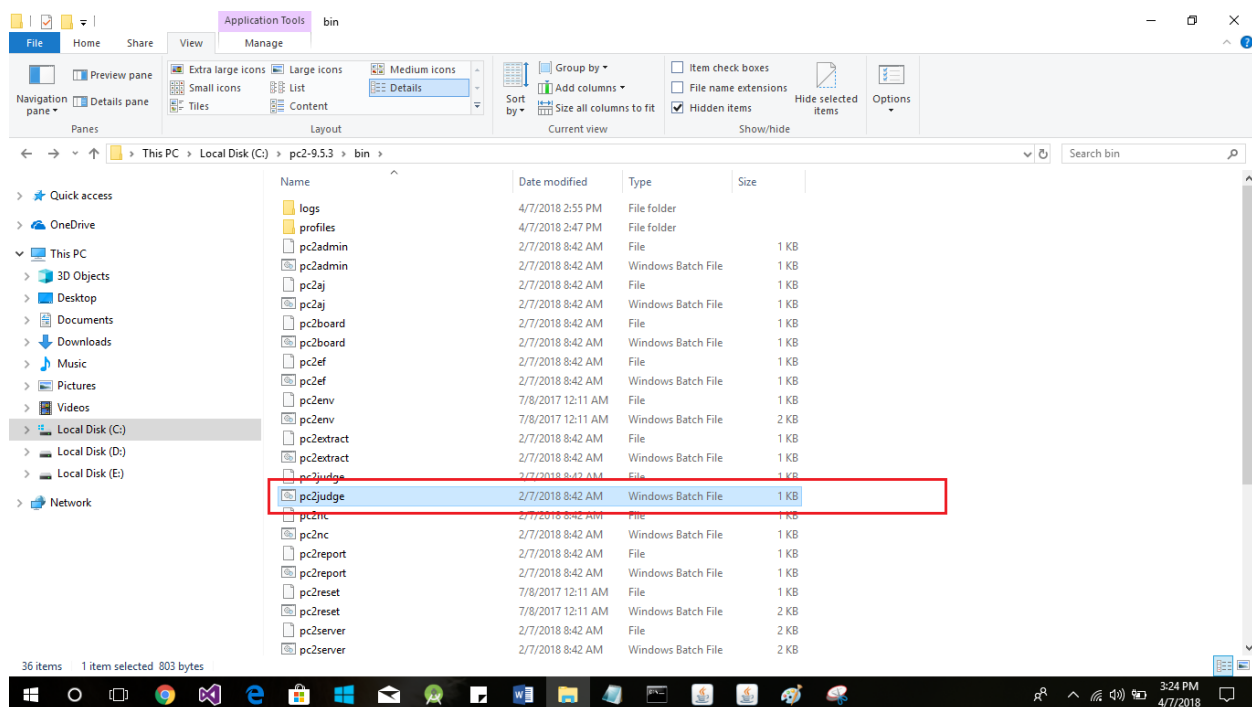
# JUDGE Module

## 3.1 Login in Judge id

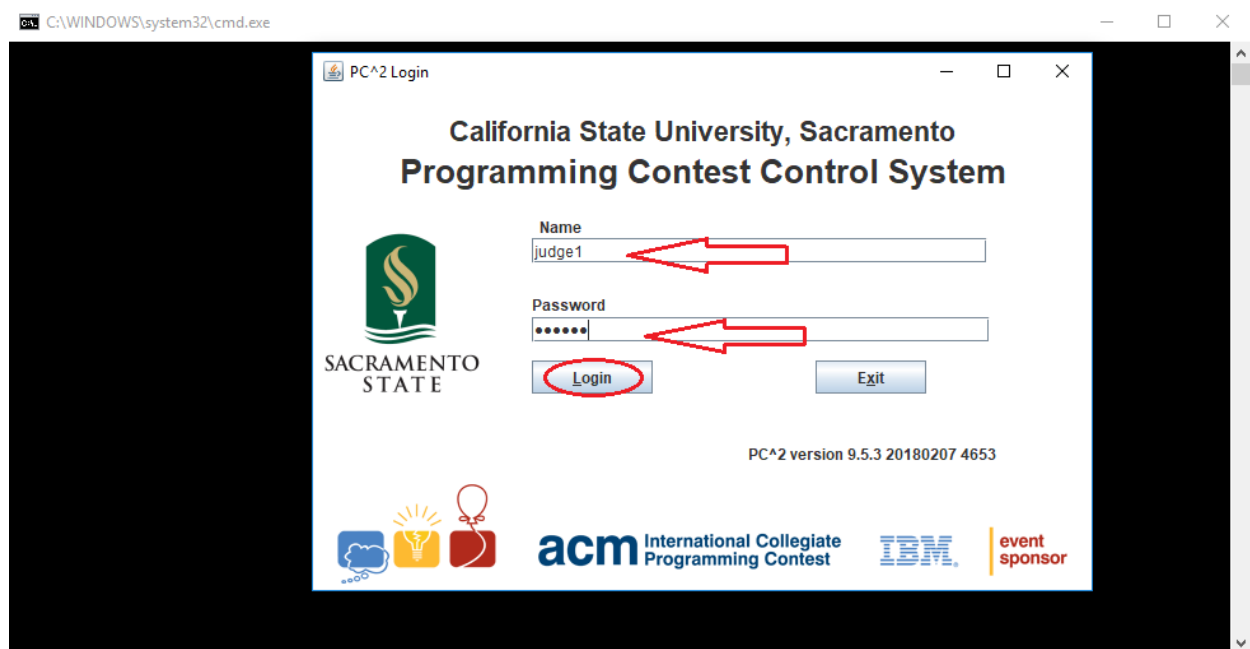
1. Go to **C:\pc2-9.5.3\bin** and click on pc2judge batch file
2. If you know login details then enter details and click on login otherwise

Note the login information of the account you are going to open:

From **Accounts tab in admin**.



After clicking The following window will be opened:



Now give the login details

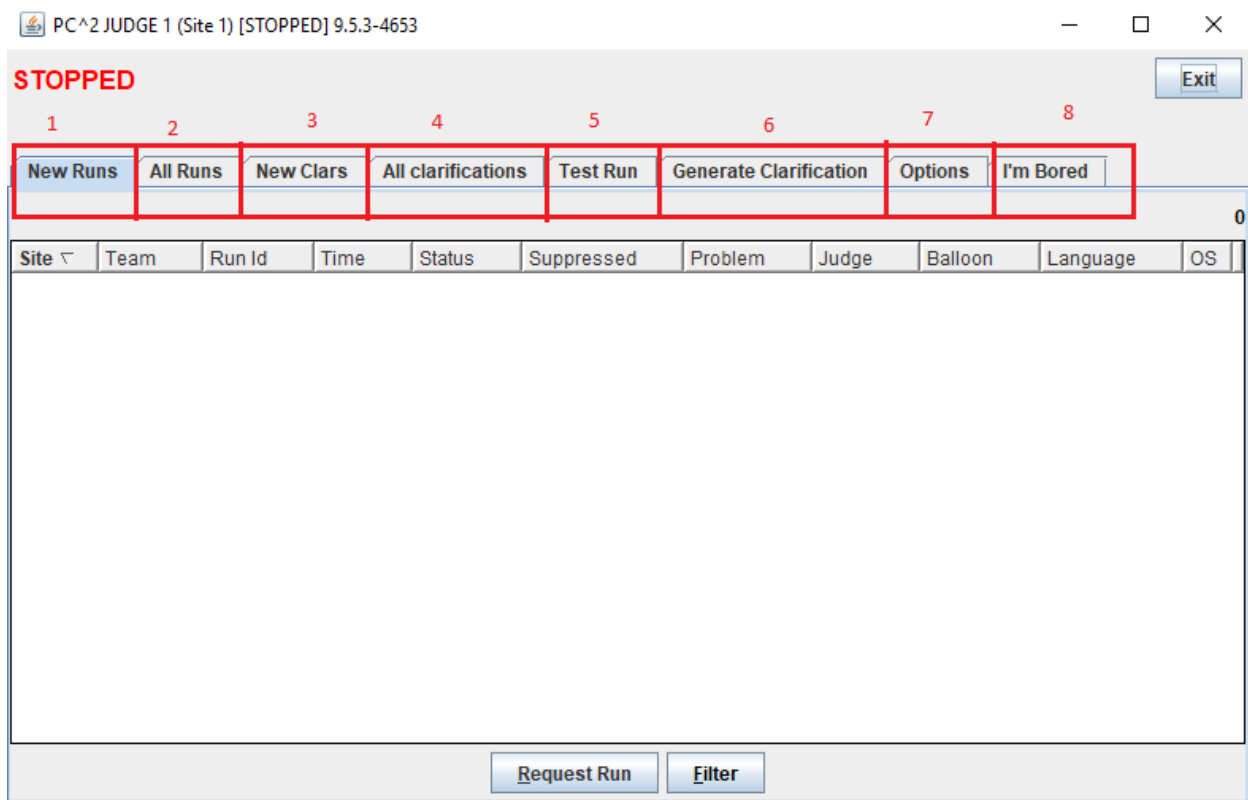
Name of the **account & password**

Here I've entered judge1 id

Which name was **judge1** & password was also **judge1 (its default)**

**Click on Login**

Now following window will be opened



Here are **8 tabs** whose description and working is given below:

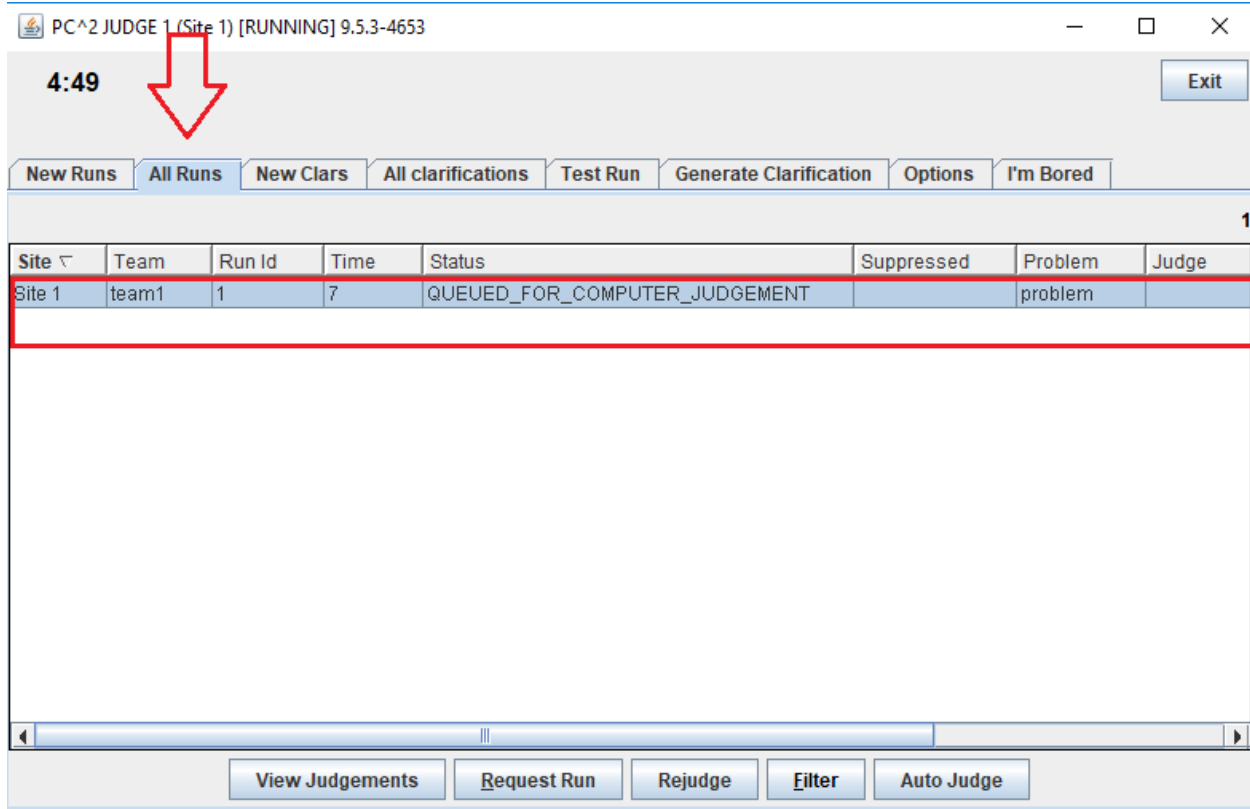
### 1. New Runs

Here all the new submitted solutions will be shown which are not checked yet but are to be checked (manually or automatically)  
 For example if any team submitted any problem and its status is **NEW**  
 Then it will be displayed in this tab.

---

### 2. All Runs

Here are all the runs are displayed whether those are **new (to be checked/in queue) or old (already checked by judge)**.  
 For example if any team submitted any problem and its status is **QUEUED\_FOR\_COMPUTER\_JUDGEMENT**  
 Then it will be displayed in this tab.  
 Like the picture given below



PC^2 JUDGE 1 (Site 1) [RUNNING] 9.5.3-4653

4:49 Exit

New Runs All Runs New Clars All clarifications Test Run Generate Clarification Options I'm Bored

Site ▾	Team	Run Id	Time	Status	Suppressed	Problem	Judge
Site 1	team1	1	7	QUEUED_FOR_COMPUTER_JUDGEMENT		problem	

View Judgements Request Run Rejudge Filter Auto Judge

When its checked by autoJudge it will return the **Judgement** to the team. **(if admin has selected only computer judging)** in problem setting.

Otherwise it will show you the run for Manual Checking after computer judge has made a judgement like the picture given below

PC^2 JUDGE 1 (Site 1) [RUNNING] 9.5.3-4653

4:35

1 Run

New Runs All Runs New Clars All clarifications Test Run Generate Clarification Options I'm Bored

3

Site ▾	Team	Run Id	Time	Status	Suppressed	Problem	Judge
Site 1	team1	1	7	Yes		problem	Me
Site 1	team1	2	13	MANUAL_REVIEW (No - Wrong Answer)	Yes	problem	Me/AJ
Site 1	team1	3	18	QUEUED_FOR_COMPUTER_JUDGEMENT		problem	

View Judgements Request Run Rejudge Filter Auto Judge

Here in blue circle the computer judge has made its judgement now you have to manually check the problem if it shows the **MANUAL\_REVIEW(any judgement)** under **status tab**

For manually check you have to click the **Request Run** Button

Following window will be opened



Select Judgement for run 5 (Site 1)

**Run Information**

Run 5 (Site 1) from team1

Problem: problem Time: 45

Language: GNU C++ Status: BEING\_JUDGED

**Assign Judgement**

Validator Recommends: Yes

☒ Notify Team

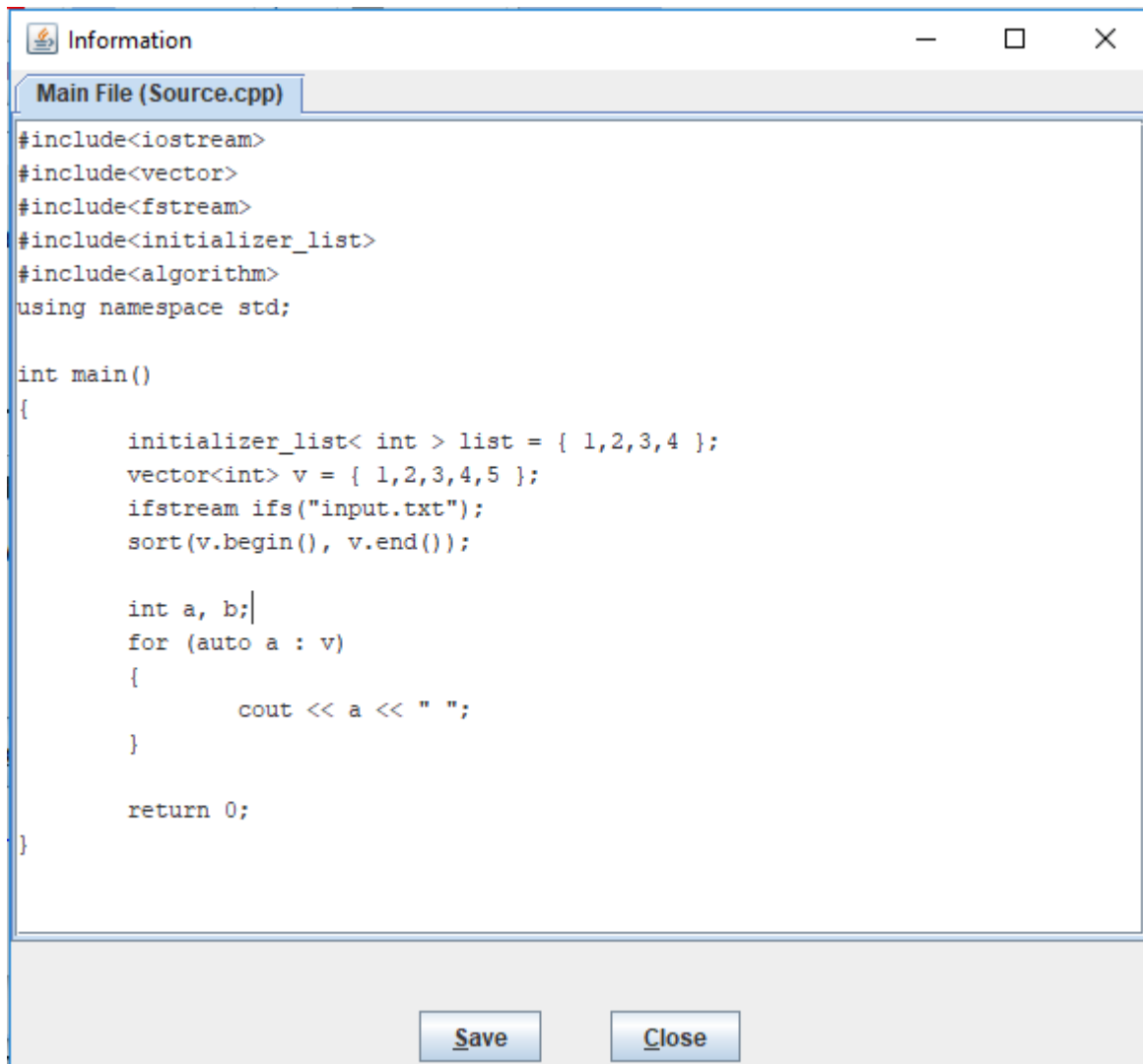
In **circle # 1** Computer judgement is displayed.

In **circle # 2** Your judgement will be displayed which you will select from clicking **Select Judgement**.

In **Blue box** there are three buttons named

- **View Source**

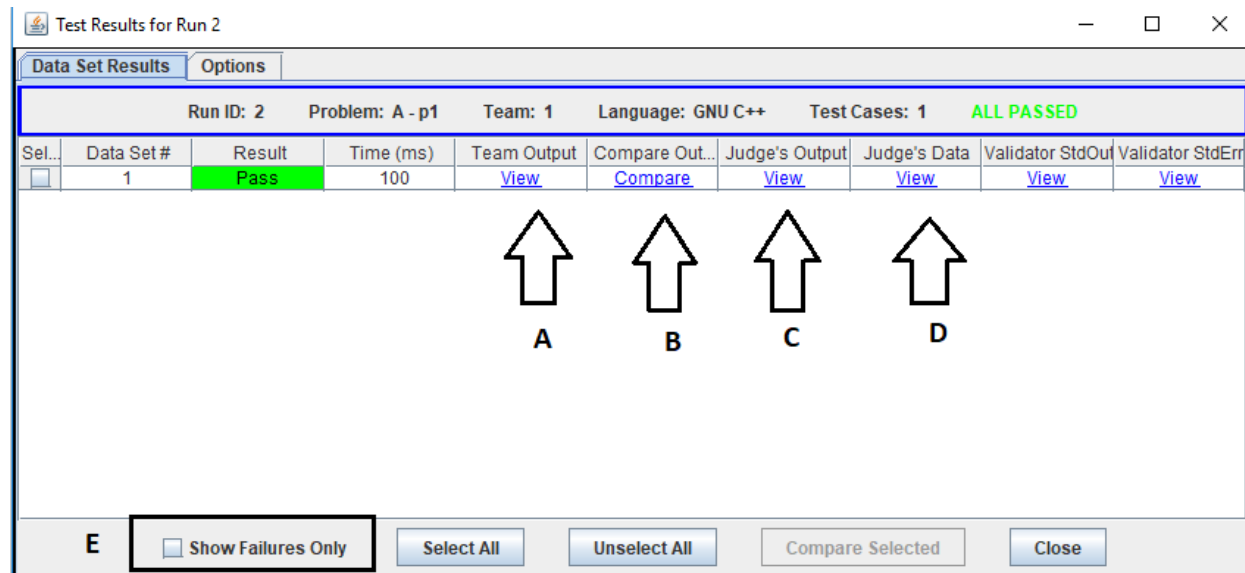
You can see the code of the team from here it will look like this



You can save the code manually if you want.

- **View Outputs & data**

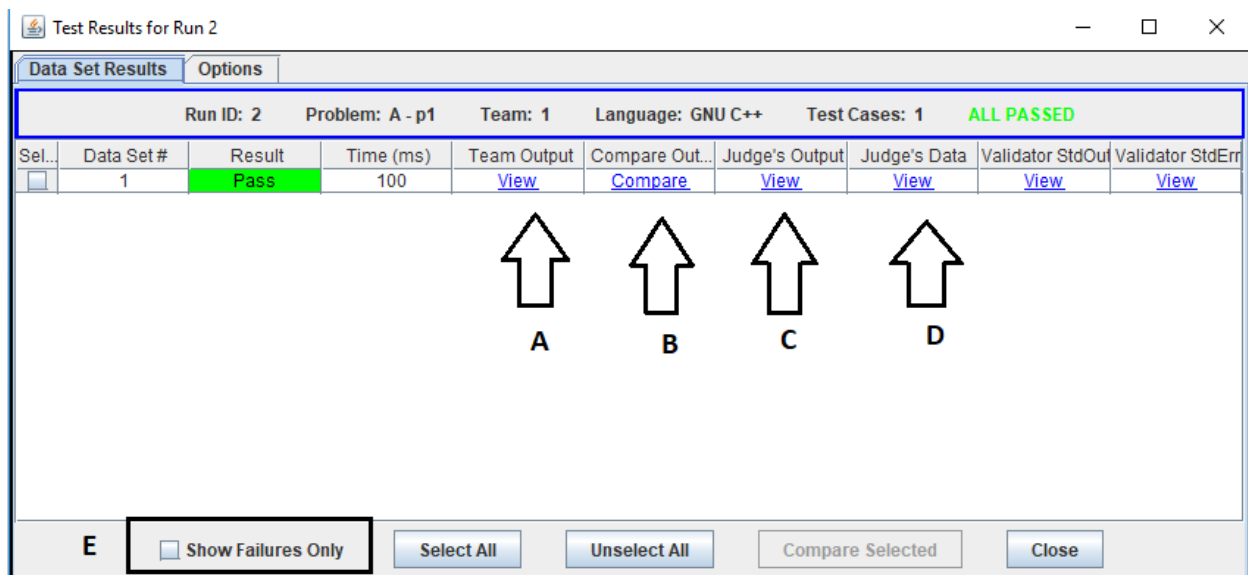
By clicking on this : a window is opened like this



It shows the result computed by **COMPUTER JUDGE**

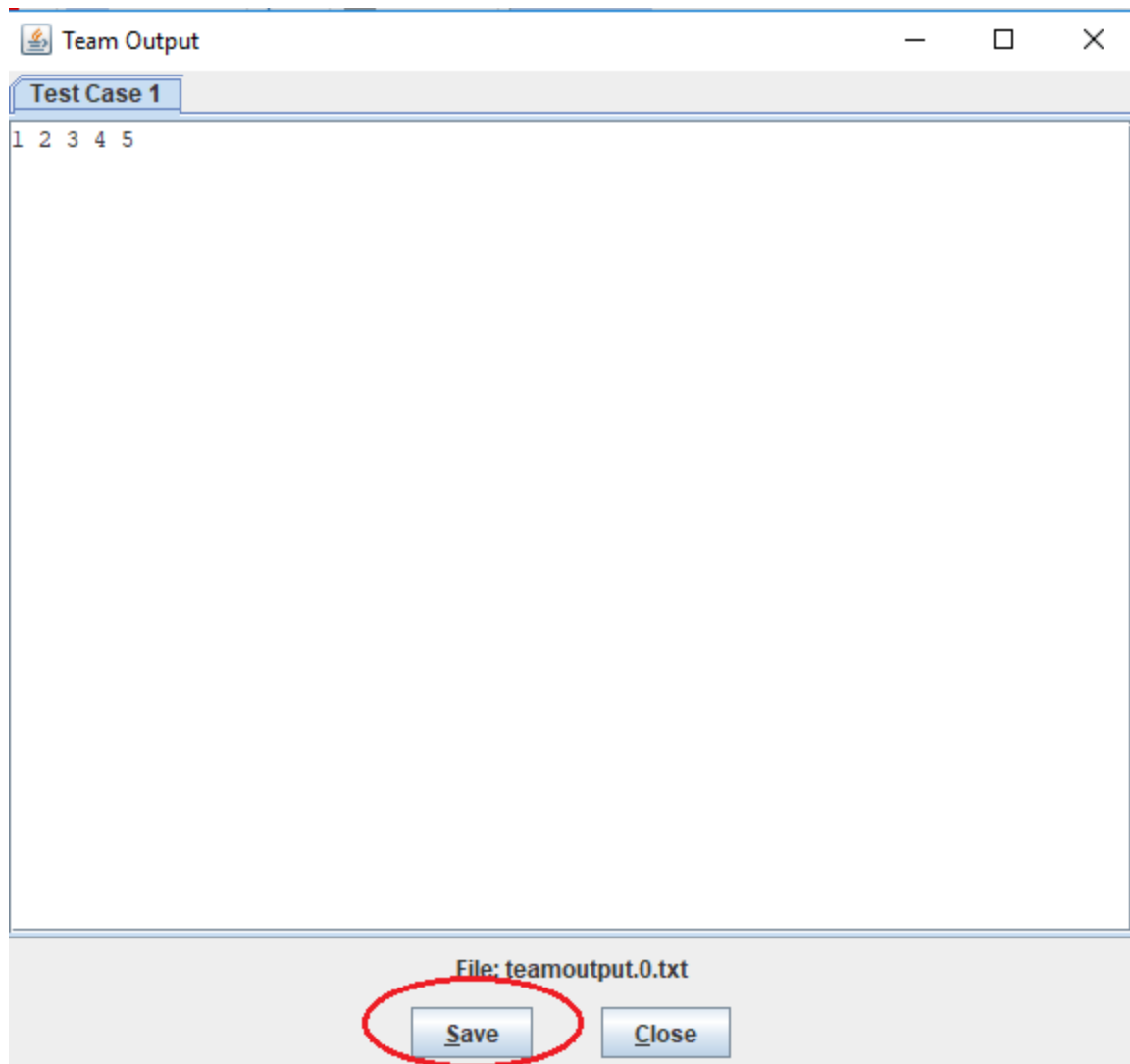
But When you click on **Execute Run** Button;

following window will be showed and it will show the result of your run.



A. From here you can see the **Teams Output** by clicking **view** under Team Output box.

Which will look like this



From here you can also “**Save**” the team output on your computer by clicking this save button.

- B. You can compare both outputs (judge & team) by clicking the **Compare** under Compare output tab.

Following window will be shown

Test Case Outputs for Run ID: 2

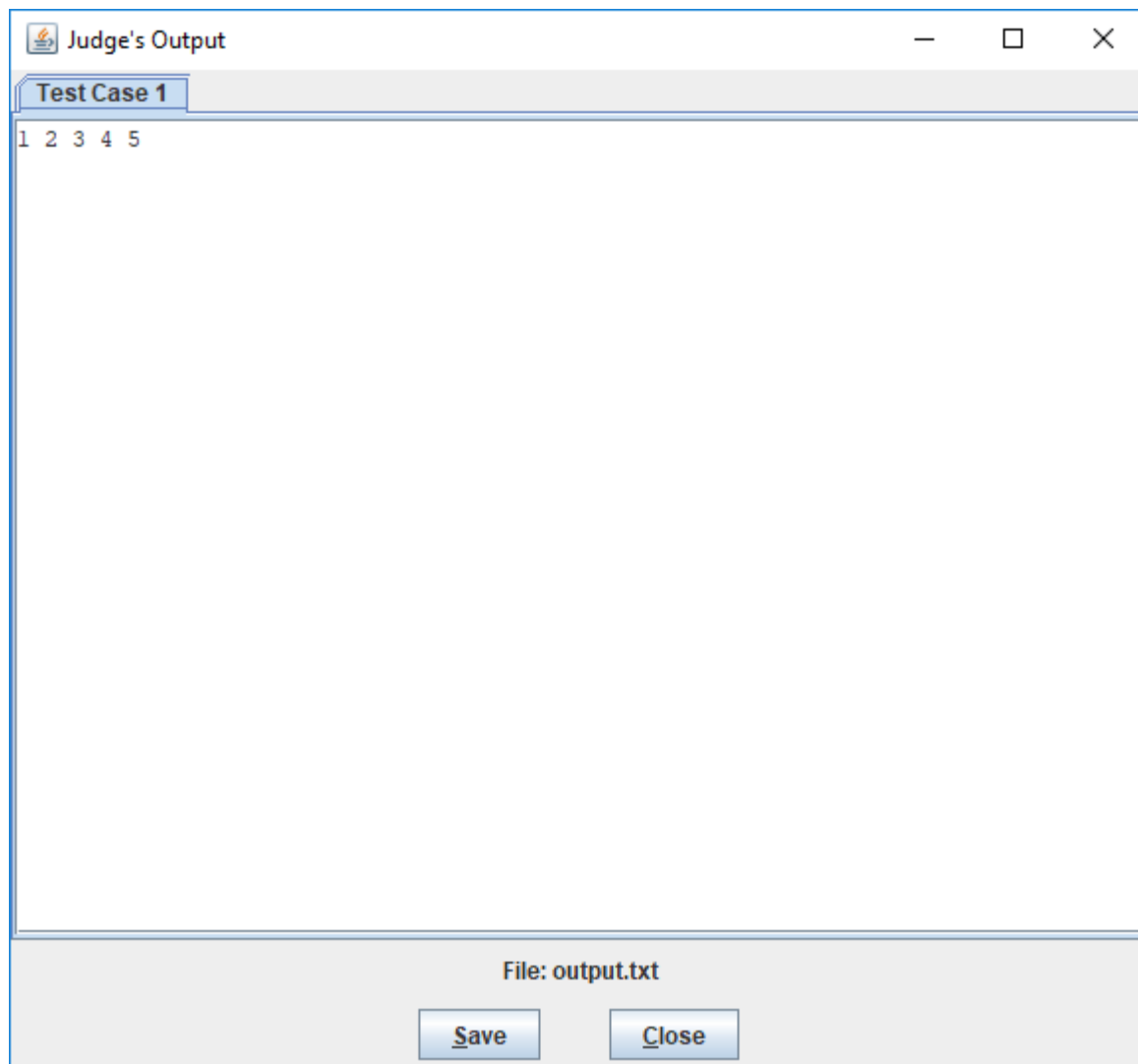
Data file for selected Test Case: 'executesite1judge1input.txt'

Test Cases	Team Output	Judge's Output
1	1 2 3 4 5	1 2 3 4 5

Click to Select)

☐ Lock Scrolling Export Close

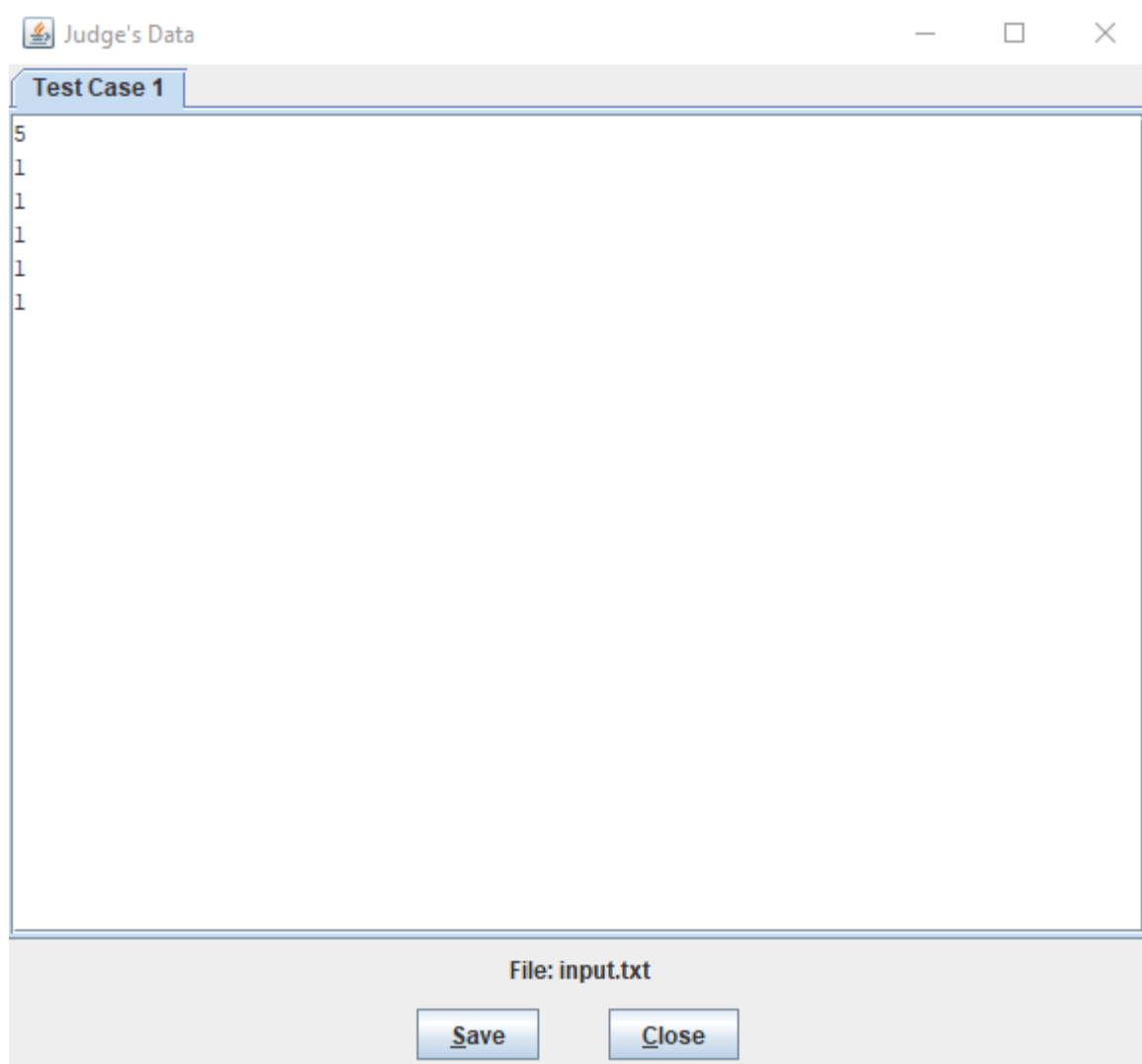
- C. Similarly you can see the **Judge output** which will look like this



You can also save this output on your computer.

- D.** You can also see the input file given by judge end by clicking **View** under **judge's data tab**

Following window will be shown.



Conating the input file in it which is set by admin.

- E. You can check or uncheck this option on basis of your requirement if you want to see the only mismatched outputs then check this option otherwise leave it unchecked.

Now close this window

You are agin back on this window (shown in picture below)

---

Select Judgement for run 5 (Site 1)

**Run Information**

Run 5 (Site 1) from team1

Problem: problem Time: 45

Language: GNU C++ Status: BEING\_JUDGED

**Assign Judgement**

Validator Recommends: Yes

☐ Notify Team

Here you will have now 2 results

One in **Circle 1 = Computer result**

Second in **Circle 2 = Manual Result**

In circle 1 there is Button **Accept Validator**

If you click this button the computer judgement will be sent to the team.

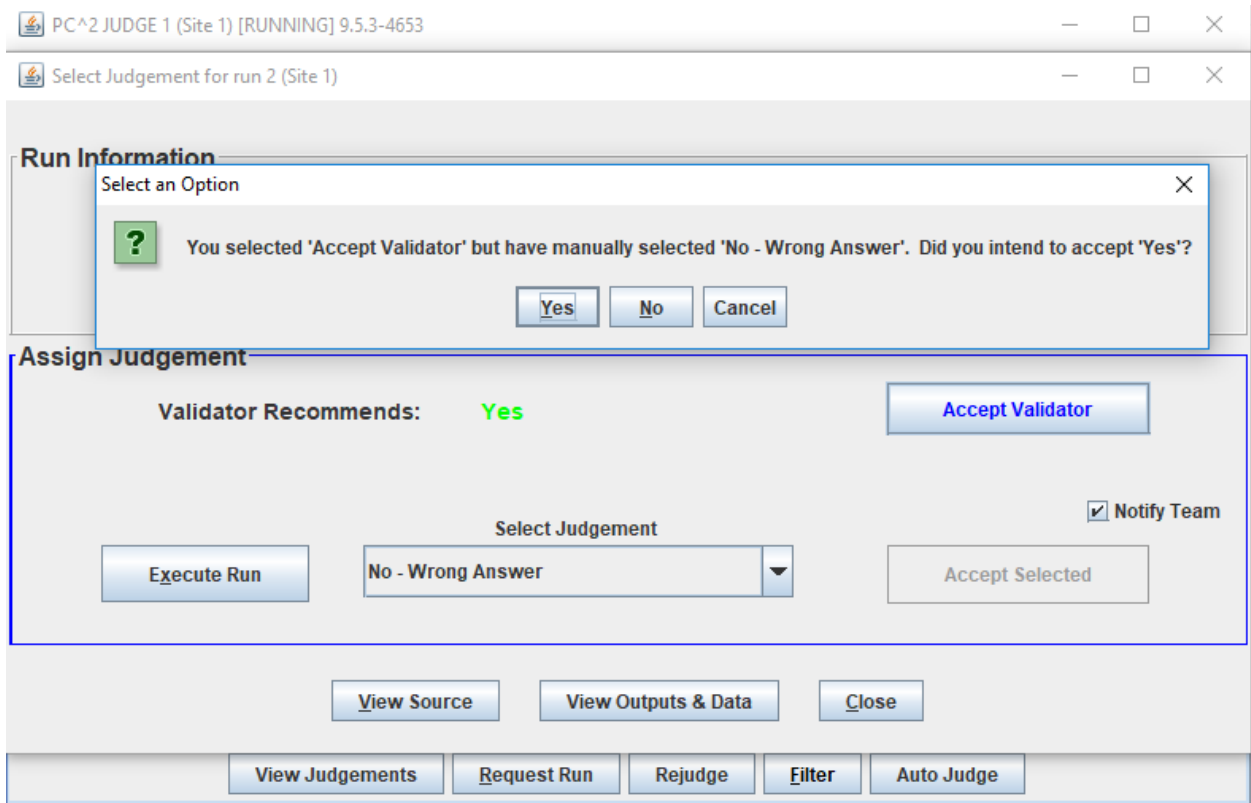
In circle 2 there is Button **Accept Selected**

If you click this button the manual judgement which is selected by you will be sent to the team.

**When Computer judgement & your judgment will be different and you select Accept Validator this window will be shown**

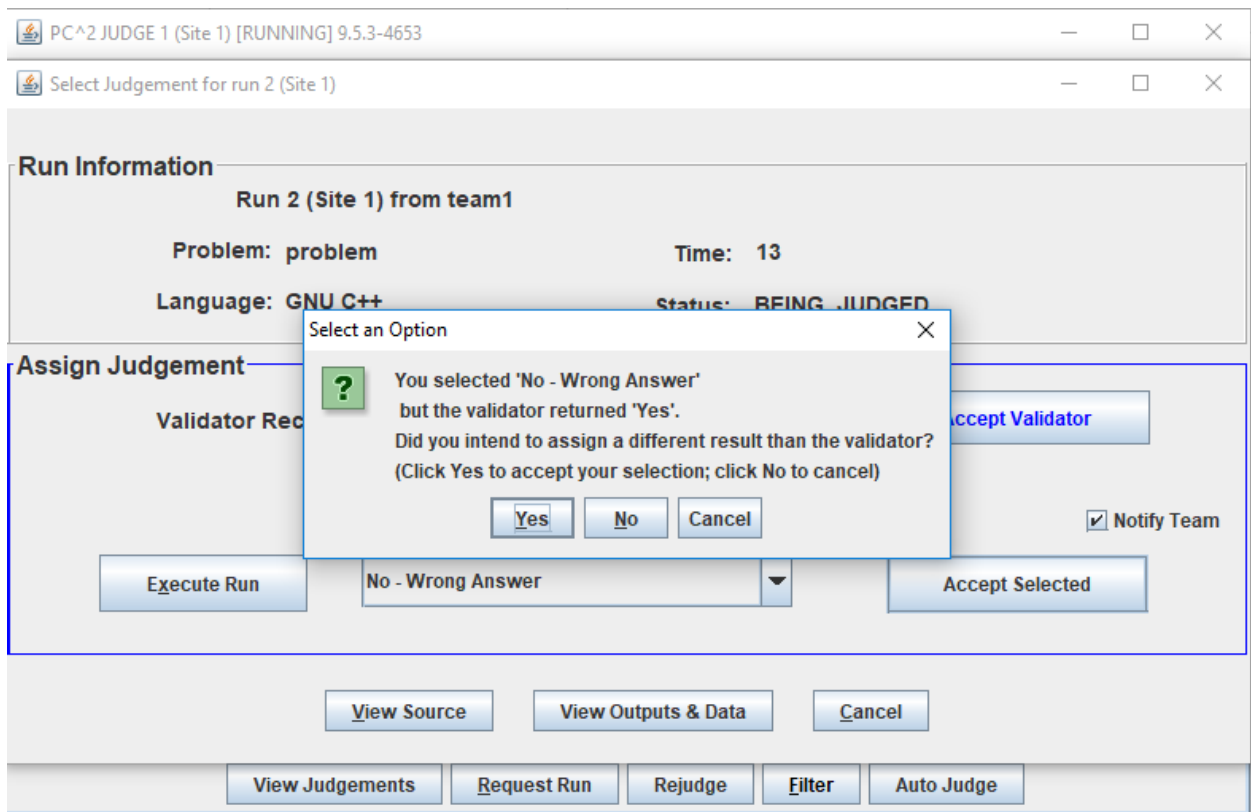
---





**When Computer judgement & your judgment will be different and you select Accept Selected this window will be shown (picture given below)**

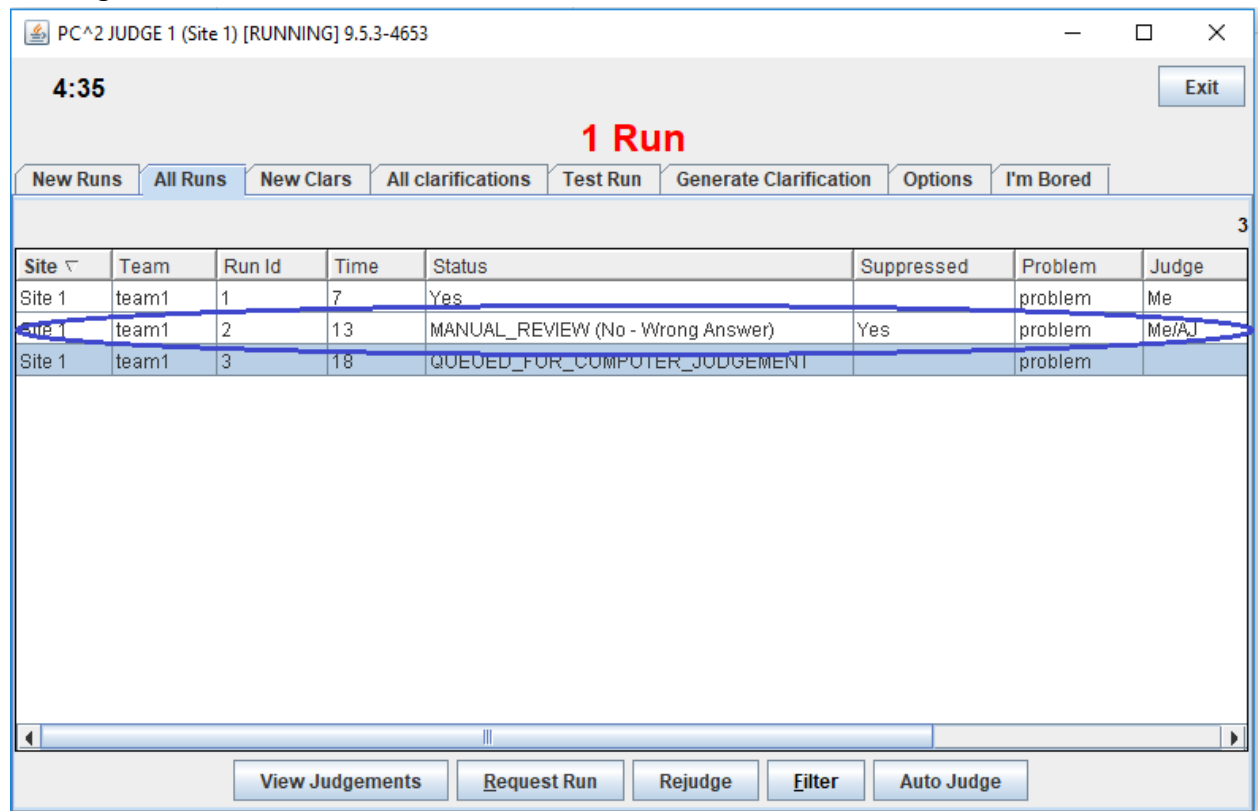
---



Now its upto you to select appropriate option.

---

Now Again come to the window



Here I told you about the **Request Run button**

**Other buttons usage:**

- 
- **View Judgement:**
- 

Before clicking this button select the particular run above whose judgements you want to see(how many judgements are made until now)

It will show a window like this

---

Run Judgements for 2 (Site 1)

There are 2 judgements

##	Judgement	Judge	Active	Time	Final	TWJ	TTJ	Comment for team	Comment for judge	X time
1	No - Wrong Answer	judge1/Computer	No	13	No	16	2s	(None)	(None)	112ms
2	Yes	judge1/s1	Yes	13	Yes	37	417s	(None)	(None)	100ms

Run 2 elapsed 13

Close

It will show all the judgments (computer + manual) of that particular run.

---

- **Rejudge:**

---

Before clicking this button select the particular run above which you want to rejudge.

Make sure a run if a run is already judged. Otherwise it is not qualified for rejudge.

It will show a window like this

Select Judgement for run 2 (Site 1)

**Run Information**

Run 2 (Site 1) from team1

Problem: problem      Time: 13

Language: GNU C++      Status: BEING\_RE\_JUDGED

**Assign Judgement**

Execute Run      Select Judgement: Yes      ☒ Notify Team      Accept Selected

View Source      View Outputs & Data      Close

From here you rejudge the already answered submission.

You **Execute Run**

**Select Judgement** and click **Accept Selected**

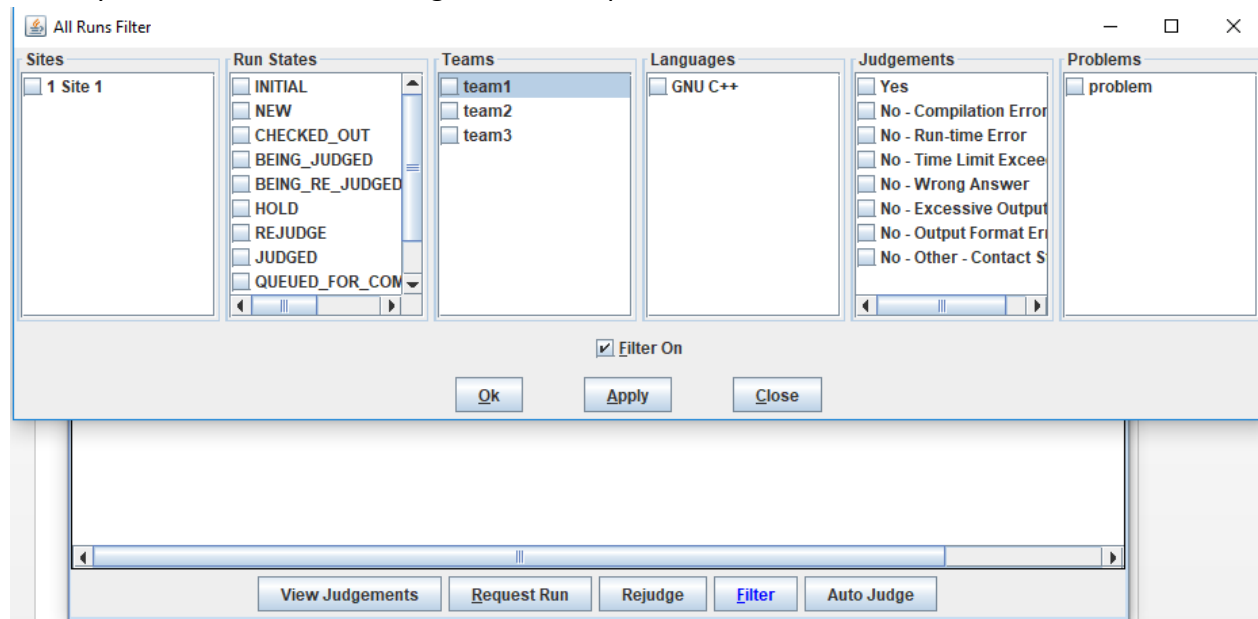
**What happens when click on Accept Selected?**

New judgement is sent to the team. After their run is rejudged .

---

- **Filter**

When you click on filter following window is opened




---

You can filter the displayed runs through this window like if you want to see only team1's runs then check **the team1 checkbox** in Teams tab.

---

And then check the **Filter on checkbox**

**And click on Apply**

When the filter is applied it will show you only filtered runs and the filter button text is shown blue as indicator that filter is on.

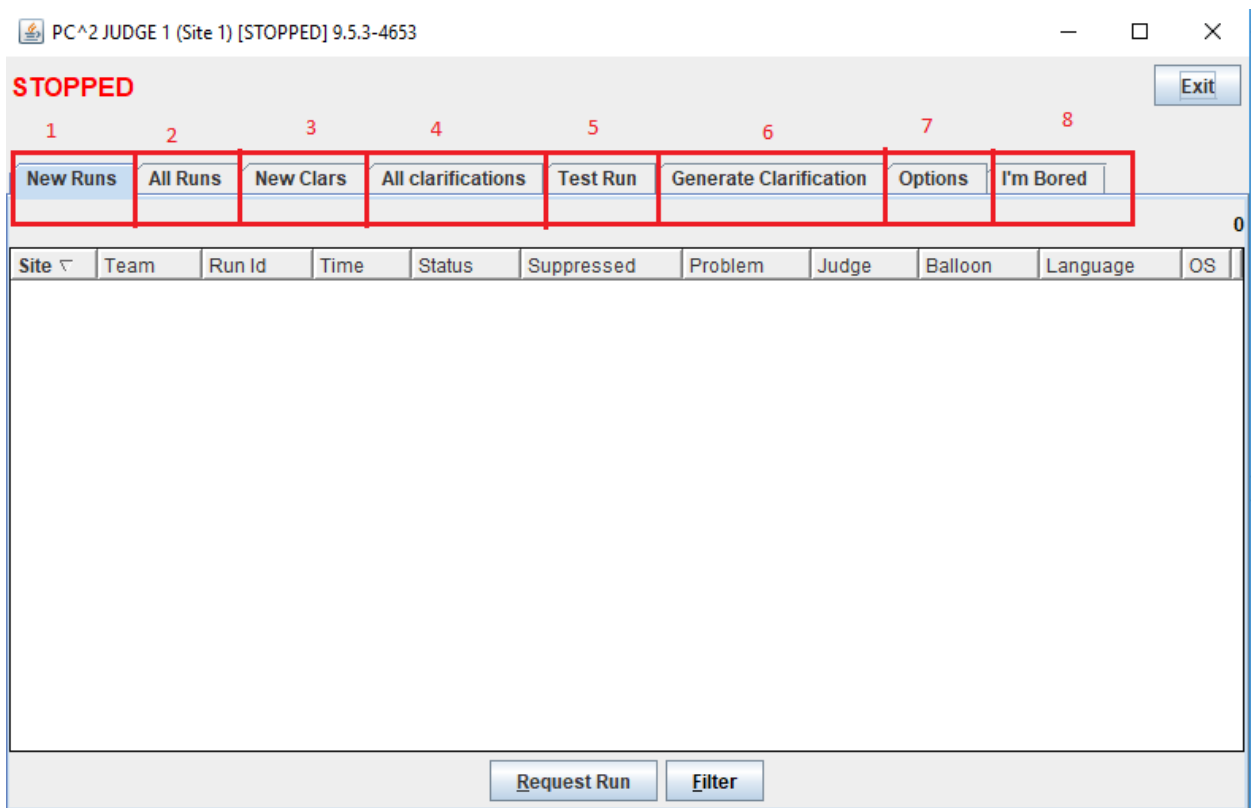
---

- **Auto Judge**

Before clicking on this select a particular run ; you want to do auto judge on. It will start computer judging for that particular run if its queued or in new status.

---

Back to this window



### 3. New Clars

Whenever a team ask for clarification the clarification is showed in this tab. Here are all clarifications which are not answered yet and you have to answer that clarification.

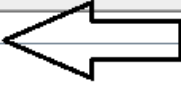
When you click on this tab you'll see the window given in picture below

PC^2 JUDGE 1 (Site 1) [RUNNING] 9.5.3-4653


3:07 Exit

**2 Runs 1 Clar**

New Runs All Runs New Clars All clarifications Test Run Generate Clarification Options I'm Bored

Site ▾	Team	Clar Id	Time	Status	Problem	Question	
Site 1	team1	1	112	NEW	General	How to do a problem	

Clarification



Answer Filter

For answering a clarification you have to select the clarification and then press **Answer**

If you don't select a clarification and click the **Answer Button** You'll get this exception

PC^2 JUDGE 1 (Site 1) [RUNNING] 9.5.3-4653

3:04 Exit

**2 Runs 1 Clar**

New Runs All Runs New Clars All clarifications Test Run Generate Clarification Options I'm Bored

Site	Team	Clar Id	Time	Status	Problem	Question
Site 1	team1	3	115	NEW	General	jhjhghjghg

Warning

⚠ Please select a clarification

OK

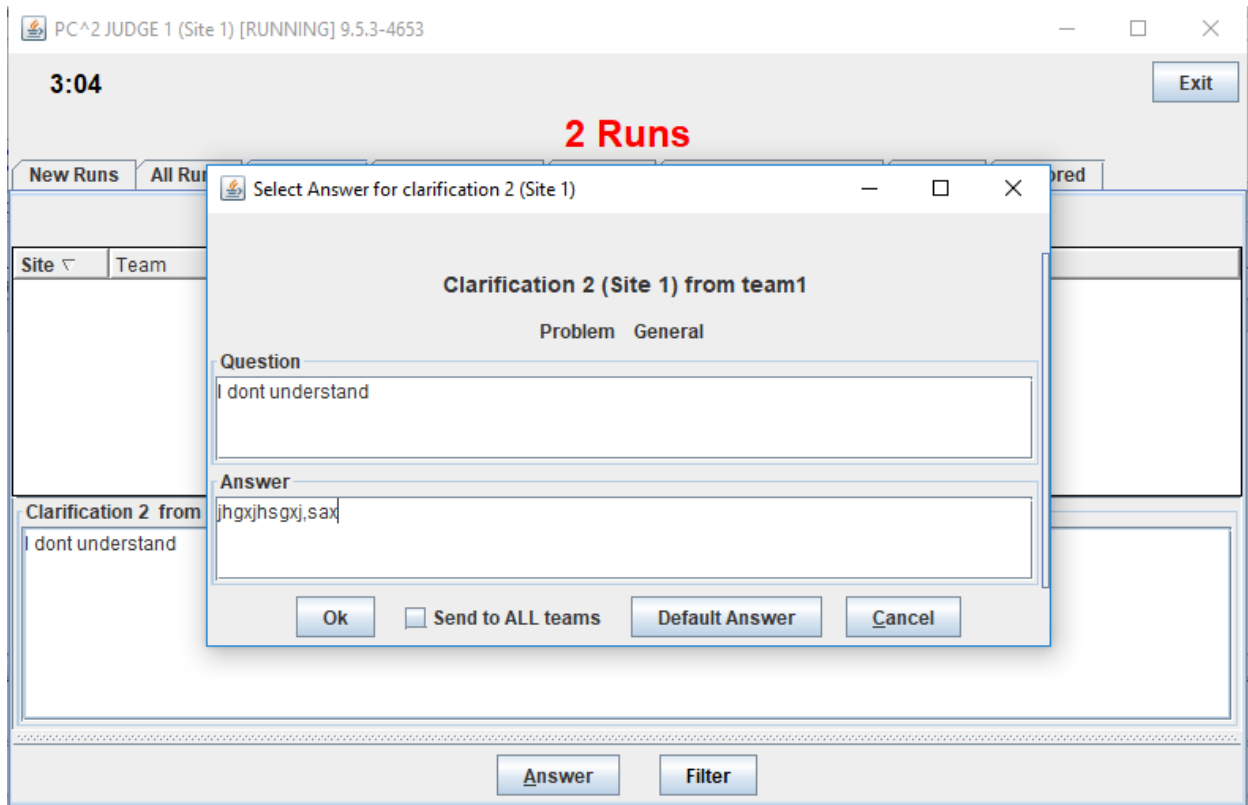
Clarification 2 from team1 (Site 1)

I dont understand

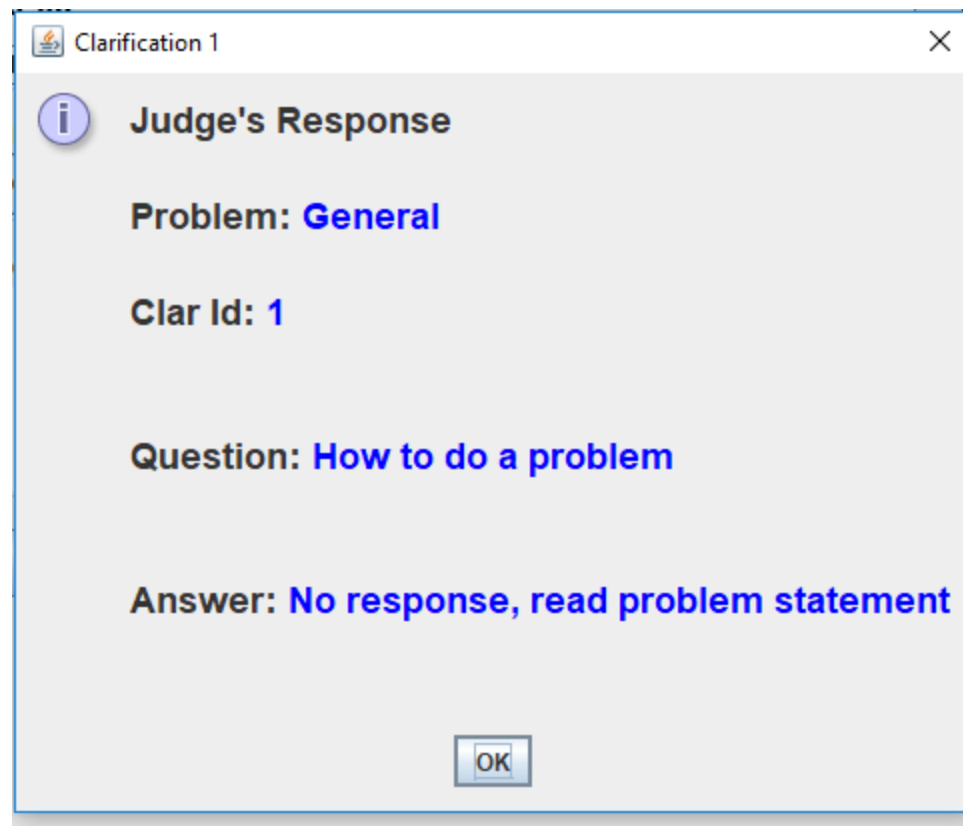
Answer Filter

After selecting the particular clarification & clicking on Answer you'll see the window opened like this in picture given below





- If you write in Answer box and press **OK** then its sent to the particular team.
- If you write something in Answer box and before pressing **OK** you check the checkbox named **Send to ALL teams** this answered clarification will be sent to all teams.
- If you don't write anything in Answer box and press **Default Answer**. The team will get the default answer like this



#### 4. All Clarifications

Here are all clarifications are shown whether those are new or already answered.

When you click on this tab you'll see the window

PC^2 JUDGE 1 (Site 1) [RUNNING] 9.5.3-4653

2:55 Exit

**2 Runs 1 Clar**

[New Runs](#)
[All Runs](#)
[New Clars](#)
[All clarifications](#)
[Test Run](#)
[Generate Clarification](#)
[Options](#)
[I'm Bored](#)

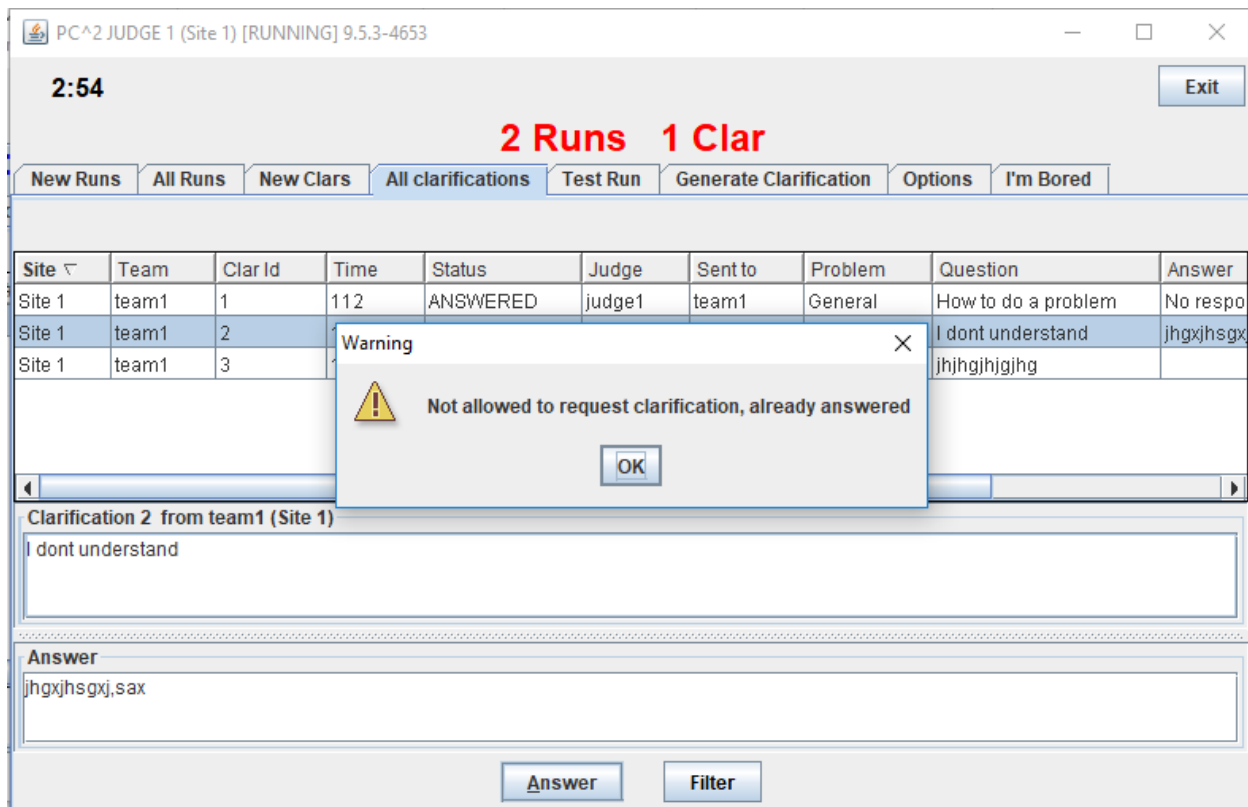
Site ▾	Team	Clar Id	Time	Status	Judge	Sent to	Problem	Question	Answer
Site 1	team1	1	112	ANSWERED	judge1	team1	General	How to do a problem	No respo
Site 1	team1	2	114	ANSWERED	judge1	team1	General	I dont understand	jhgxjhsgx
Site 1	team1	3	115	NEW		team1	General	jhhghjhgijhg	

Clarification

Answer

Answer Filter

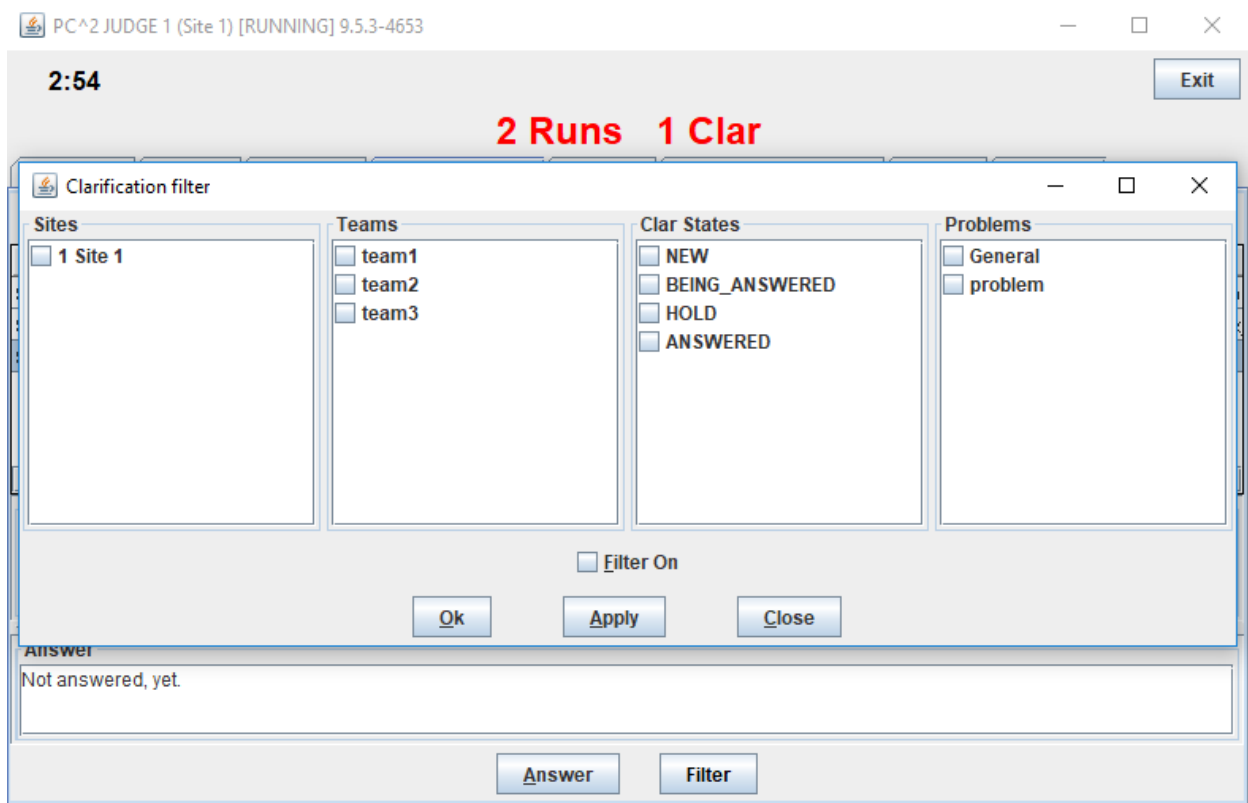
Here you can answer the clarifications with **NEW** status only. If you try to answer the **ANSWERED** clarifications you'll get following message.



The method of answering the NEW clarifications is already told above.

- **Filter Button**

When you click on this the following window is opened



You can apply the filter according to your demand. You can check multiple checkboxes at a time.

And apply filter by checking the **Filter on** checkbox and clicking the **Apply** Button.

The Filter Button's text turns blue in main window indicating that filter is on.

---

## 5. Test Run

It gives you the similar interface as each team is given. You can select a problem , select a language and submit any saved code from here and can test the code by yourself.

When you click on this tab

You'll see the window given in picture below

PC^2 JUDGE 1 (Site 1) [RUNNING] 9.5.3-4653

2:41

Exit

2 Runs 1 Clar

New Runs All Runs New Clars All clarifications Test Run Generate Clarification Options I'm Bored

Problem  
Select Problem

Language  
Select Language

Main File  
C:\Users\Memona Sultan\Documents\Visual Studio 2015\Proj... Select

Additional Files

Add Remove

Test

## 6. Generate Clarification

If you want to broadcast anything to all teams you can generate clarification from here.

If the clarification is about any problem you can select the **particular problem** otherwise select **general**.

Write your clarification in **Question** tab. And **submit clarification**.

PC^2 JUDGE 1 (Site 1) [RUNNING] 9.5.3-4653

2:34

Exit

2 Runs 2 Clars

New Runs All Runs New Clars All clarifications Test Run Generate Clarification Options I'm Bored

Problem  
Select Problem  
General problem  
problem

Submit Clarification

it will pop up in your **New Clar** tab **with your name** like this


PC^2 JUDGE 1 (Site 1) [RUNNING] 9.5.3-4653

2:38 Exit

**2 Runs 2 Clars**

[New Runs](#)
[All Runs](#)
[New Clars](#)
[All clarifications](#)
[Test Run](#)
[Generate Clarification](#)
[Options](#)
[I'm Bored](#)

Site ▾	Team	Clar Id	Time	Status	Problem	Question	
Site 1	team1	3	115	NEW	General	jhjhghjghjhg	
Site 1	judge1	4	141	NEW	problem	Input format?	



Clarification 2 from team1 (Site 1)

I dont understand

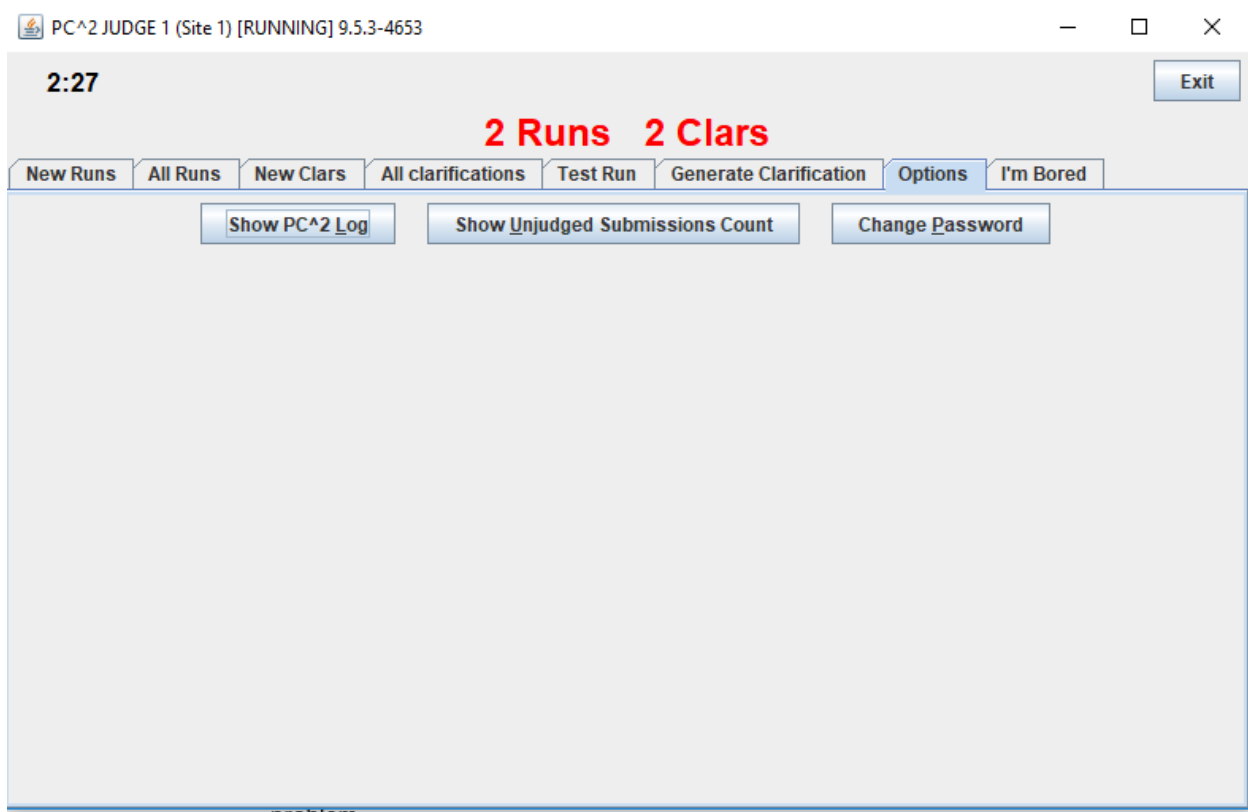
Answer Filter

From there you'll answer the clarification and send it to all teams.

## 7. Options

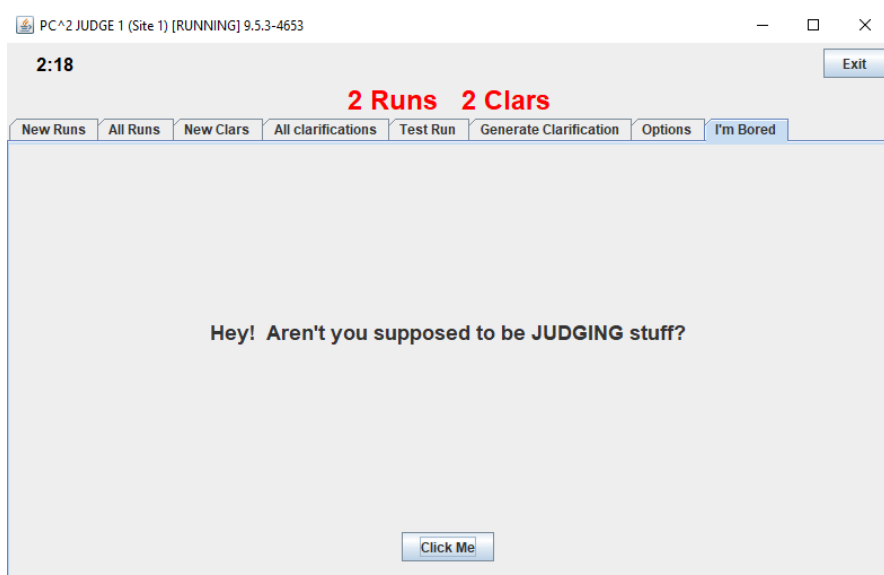
It will open the following window

1. from here you can see the Log about your ID
2. you can see the unjudged submission count.
3. You can change your password from here.



## 8. I'm Bored

If any team is not submitting any problem and the judge is being bored then this tab is for that judge he/she can play this game until the submission of any problem.





# Team

- Goto **C:\pc2-9.5.3\bin** and open **pc2team** batch file
- Login with credentials given.

After login the following window will be opened

## SUBMIT RUN

PC^2 TEAM 1 (Site 1) [RUNNING] 9.5.3-4653

1:49 Exit

Submit Run View Runs Request Clarification View Clarifications Options

Problem  
problem

Language  
GNU C++

Main File  
C:\Users\Memona Sultan\Documents\Visual Studio 2015\Proj... Select

Additional Files

Add Remove

Test Submit

1. Here you can select the problem you are about to submit.
2. Here you select your language in which you have written the code.
3. Here you select the source file in which you have written the code.
4. From here you can test your code on your machine.

5. From here you can submit the problem. After clicking the submit button a confirmation prompt will be opened with your selected information. You have to select “YES” if you really want to submit the problem. Otherwise select “No” or “Cancel”
6. After selecting “Yes” a prompt will be shown with **runID**.

### View Runs

1:49 Exit

Submit Run **View Runs** Request Clarification View Clarifications Options

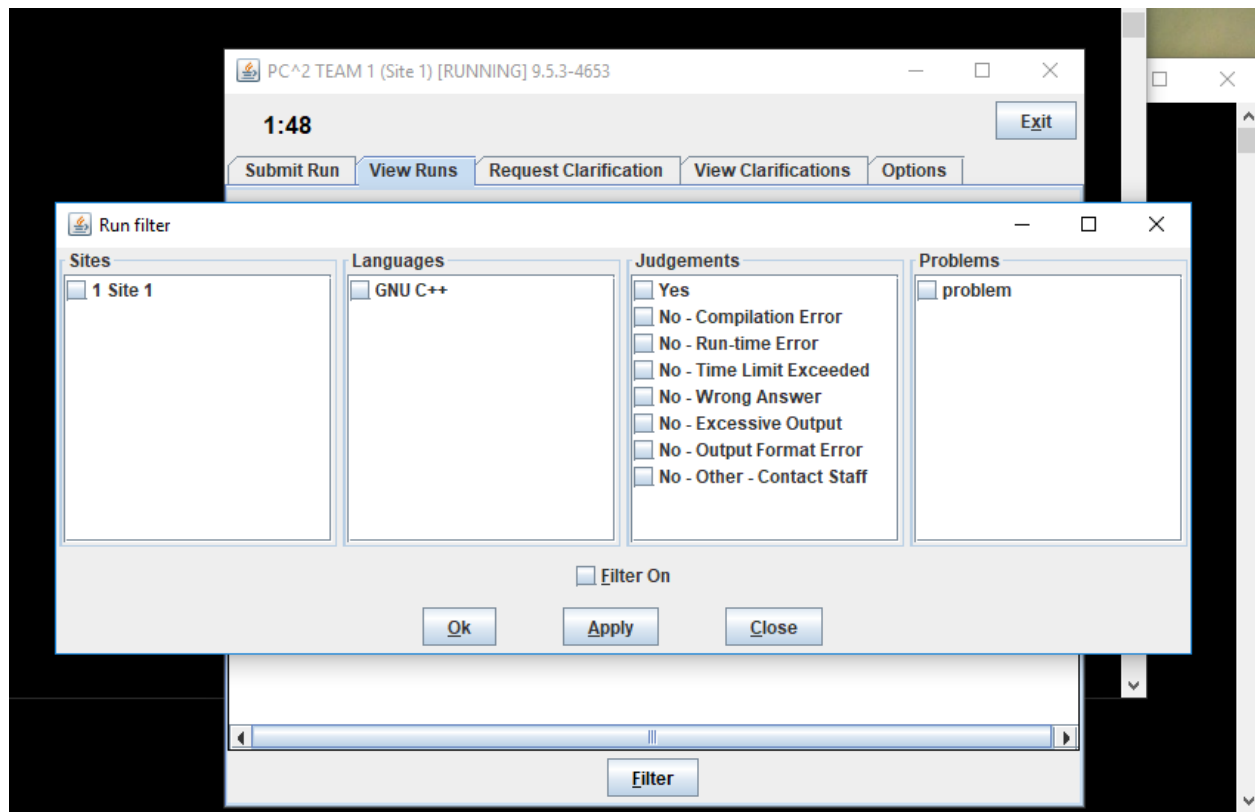
5

Site ▾	Run Id	Problem	Time	Status	Balloon	Language
Site 1	1	problem	7	Yes		GNU C++
Site 1	2	problem	13	Yes		GNU C++
Site 1	3	problem	18	No - Run-time Error		GNU C++
Site 1	4	problem	45	NEW		GNU C++
Site 1	5	problem	45	NEW		GNU C++

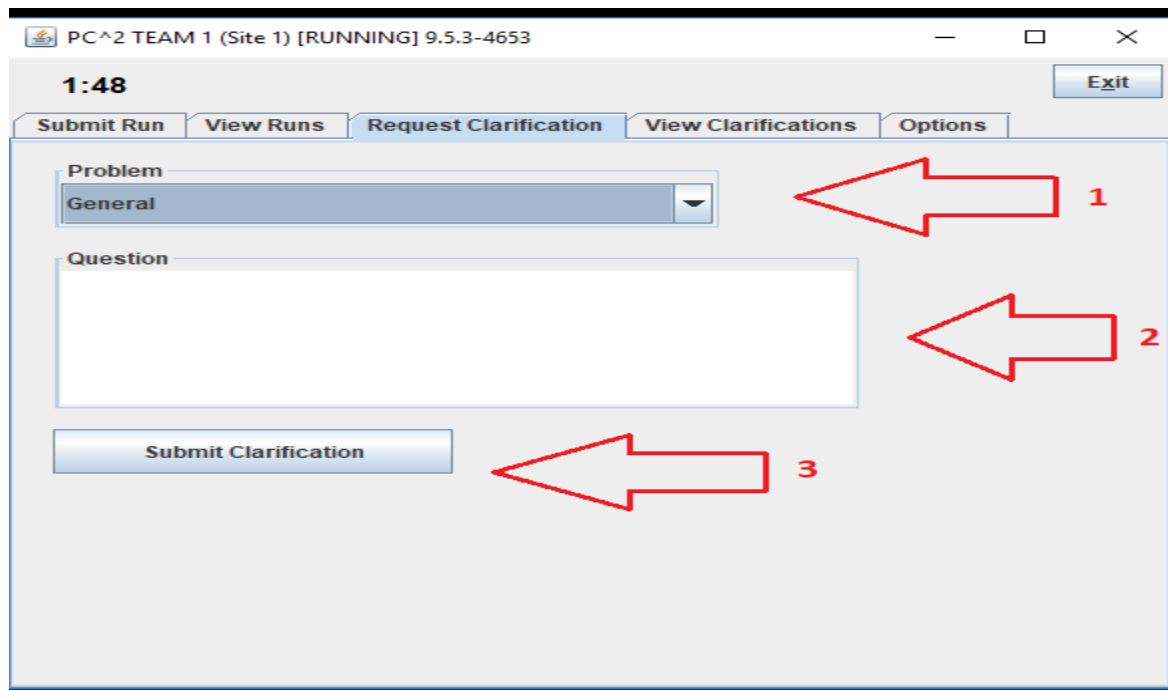
**1**

Filter **2**

1. From here you can see your all submitted runs with their corresponding **time** , **status** , **run id**.
2. From here you can view by using filter your runs according to your demand. The window after clicking Filter opened will be look like this



### Request Clarification



1. From here you select the problem or General if your query is not about any particular problem.
2. Here you enter your query.
3. Here you click this button to send your query to judges end.

### View Clarifications

PC^2 TEAM 1 (Site 1) [RUNNING] 9.5.3-4653

1:47 Exit

Submit Run View Runs Request Clarification View Clarifications Options

Site ▾	Team	Clar Id	Time	Status	Problem	Question
Site 1	team1	1	112	Answered	General	How to do a problem
Site 1	team1	2	114	Answered	General	I dont understand
Site 1	team1	3	115	New	General	jhhghghghghg

Clarification 2 from team1 (Site 1)

I dont understand

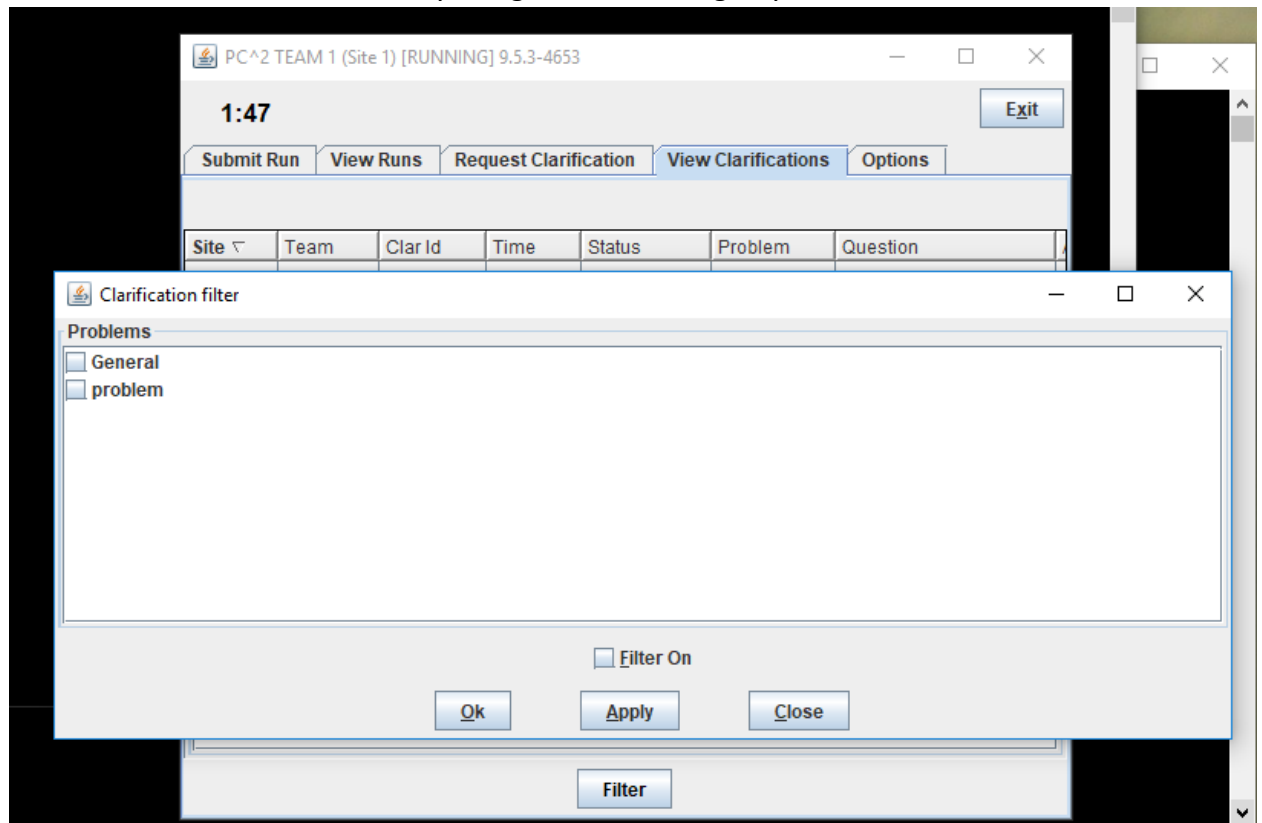
Answer

jhgxjhsgxj,sax

Filter

1. Here you can see your all sent clarifications and the clarifications sent by judges to all teams are also displayed here you can see the answered and unanswered clarifications here
2. If you select any clarification; here you see your query/ question.
3. Here you see the answer of that question ; given by judges.

4. You can also view clarifications by using filter according to your demand.



### Options

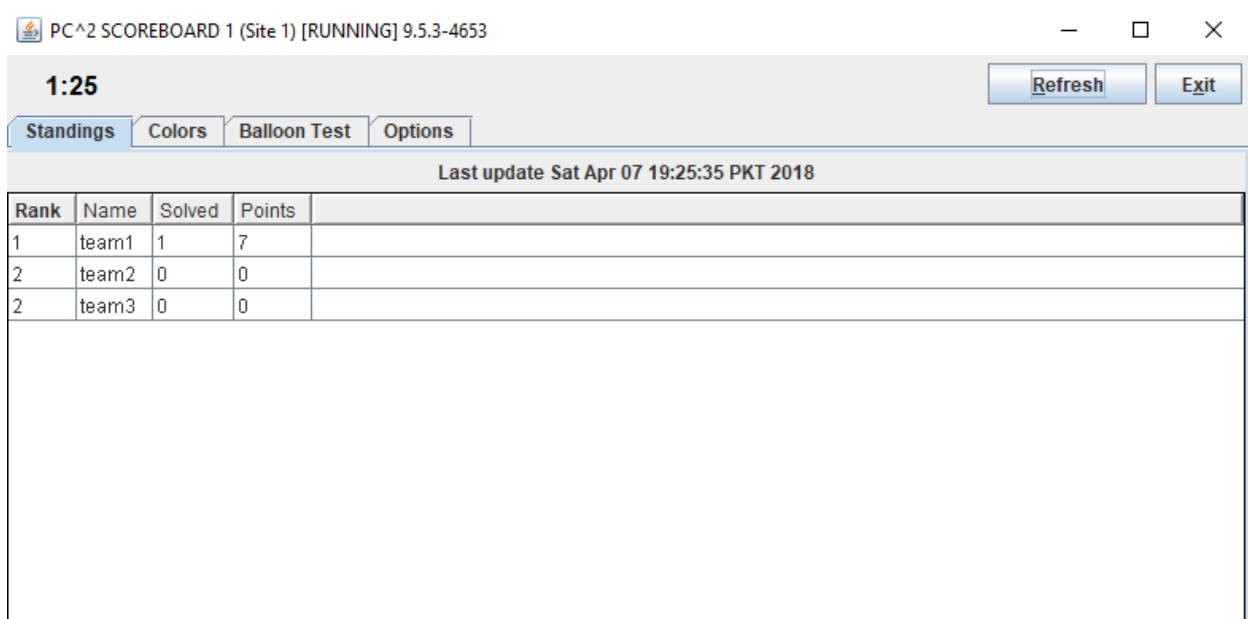


Here you see the options and action buttons which is given by admin.

You can see your pc2 log here related to your id.

# SCOREBOARD

- Goto **C:\pc2-9.5.3\bin** & open **pc2board** batch file.
  - Enter credentials which is **Name: scoreboard1 Password: scoreboard1**
- Following window will be opened



PC^2 SCOREBOARD 1 (Site 1) [RUNNING] 9.5.3-4653

1:25 Refresh Exit

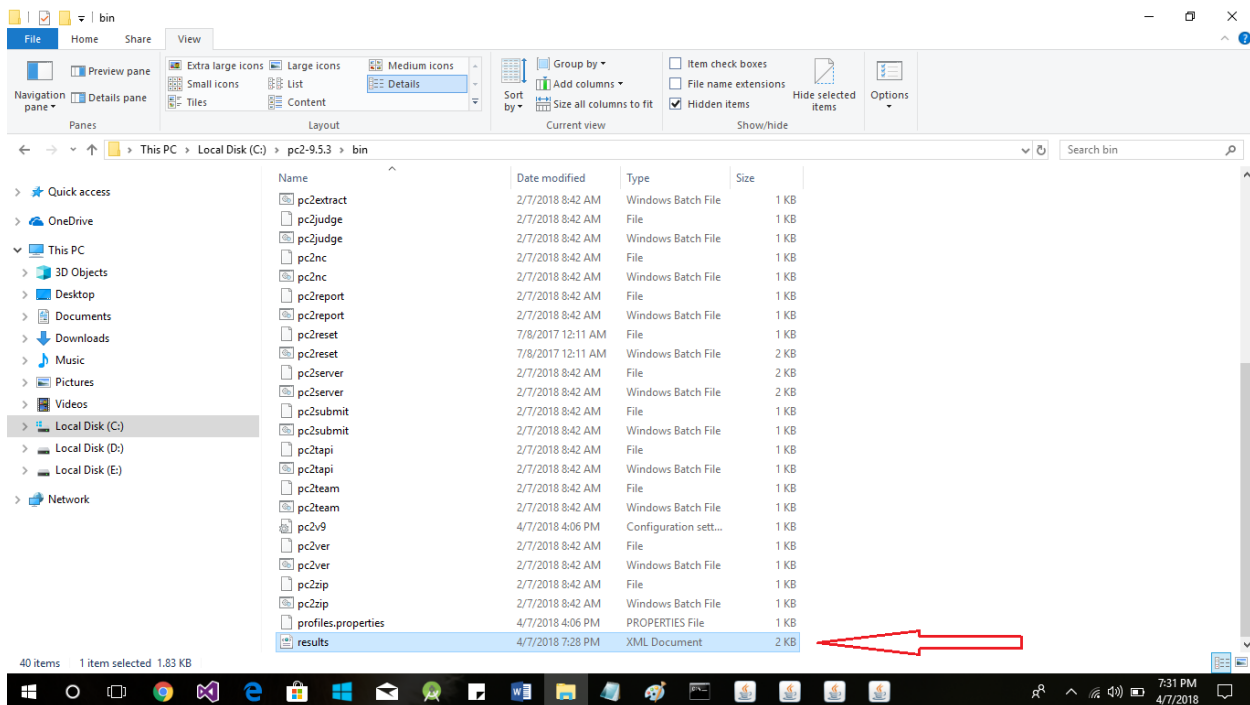
Standings Colors Balloon Test Options

Last update Sat Apr 07 19:25:35 PKT 2018

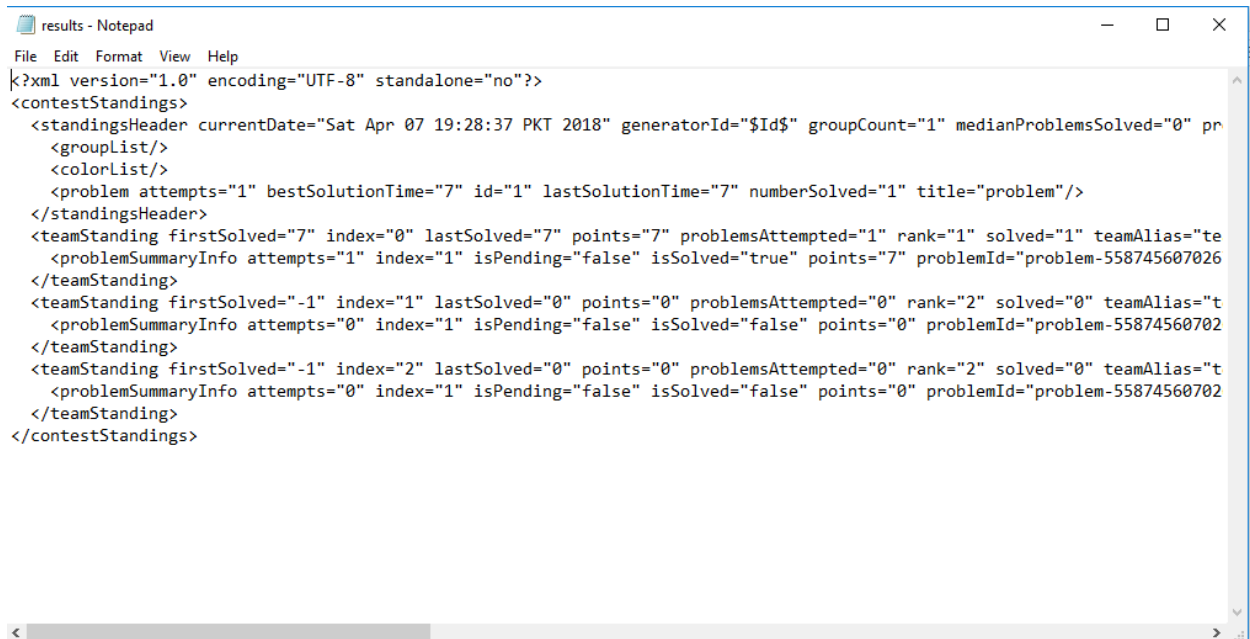
Rank	Name	Solved	Points
1	team1	1	7
2	team2	0	0
2	team3	0	0

It can be opened in any pc and projector can be used with that pc to show the result to all.

**Note:** As soon as we open scoreboard result.xml file is generated in C:\pc2-9.5.3\bin



**And it looks like this**



**If you want to change layout of scoreboard you can do it with admin login.**

## **RESET PC^2:**

### **Note:**

**After competition is over and collecting all files you needed. You can reset the PC^2 by clicking on pc2reset batch file in its bin folder.**