**SonarQube Setup:**

* sonarqube server 5.4 - http://www.sonarqube.org/downloads
* sonar runner 2.6.1 - https://sonarsource.bintray.com/Distribution/sonar-scanner-cli/sonar-scanner-2.6.1.zip (need sonar-runner to run our source code)

-->There are different ways to setup the runner like using "gradle","jenkins" or some other plugins we can use to run the sonar-runners.

-->so we can use normal method i.e command prompt to run this sonar-runner

-->so for this sonar-runner to be downloaded i.e sonarqube-scanner 2.6.1 from the link provided above

* setup path environment variable to bin folder
* run the sonar-runner and analyze the report

**Now Starts:**

* After downloading these 2 those are  1.sonarqube server 5.4 and 2.sonar runner 2.6.1 and these will be downloaded in zip format(files).so unzip it
* After unzipped we can find some internal folders like bin,conf,lib ets in both files.
* now we need to setup the path so for that go to sonar-scanner folder which was downloaded--in that go to till bin folder copy the address like"..../bin" and paste it in path variable that goto system properties--system variables--edit path variable.
* so next step is we need to analyze the report for that we can take any java project like sample as follows
* **Sample Java Project**

           package com.sample.beans;

           class HelloWorld

           {

                   public static void main(String args[])

                    {

                            Sysytem.out.println("Hello World..........");

                    }

            }

* Now I want sonarqube to analyze this class file and give me the report whether everything is fine or it has any issues like that.If there are any issues it should tell me what are the issues
* so now i want to configure this project in the sonar-runner properties so that it is going to scan this java project and give us the results
* so inorder to do that goto sonar-runner "conf" folder--in that we can see sonar-scanner "properties file"--right click and edit it--
* sonar-scanner properties file will have some information or few entries related to sonarqube server like

1. configure here general infornation about the environment such as sonarqube DB details oracle,mysql server url.
2. defalut url to access the report
3. source encoding UTF-8
4. username and password etc

* so its done we need to configure sone information or few entries related to our project so that sonarqube will pickup this project details and it will try to analyze the source code of the project
* so now add the few entries to analyze the java project i.e,

          sonar.projectKey=JavaProject

          sonar.projectname=JavaProject

          sonar.projectVersion=1.0

          sonar.sources=c:/users/admin/workspace/JavaProject/src/com/sample/beans(workspace path if we develop project in eclipse we need to change it to backward slash for windows..for unix or linux no need to change this format)

   projectKey should be unique for the entire sonarqube instance so here iam giving projectKey as "JavaProject" as above

* after everything is done we need to run the sonarqube --bin--windows64--in that folder open the command prompt--in cmd prmpt type **Start Sonar.bat-**-press enter(so it starts the sonarqube server).
* once sonarqube server starts then we have run the sonar runner then it will run all the source code  that we defined in the sonar runner properties file and it will try to publish the report to this server.
* as we set the path for sonar runner,we can run the sonar runner from any where
* once server starts it will display message on cmd prmpt like "process is up".Inorder to check the provess is up or not got to browser and type **"http://localhost:9000"** 9000 is default port.so the welcome page appears and there will be no projects bcoz we have'nt start sonar runner
* now we can got ot the workspace folder and then goto JavaProject main folder anthen there open the cmd prompt and type **"sonar runner.bat"**
* when we start this runner it will take all the properties configured in tha sonar runner.properties file and it will identify what are the sources we defined over there and tries to analyze all the java files and the report will be sent to back to the sonarqube server
* Now the sonarqube server processes the report and displays in a standard report with all the defects or the code issues it is going to find .
* so now once sonar runner starts then goto browser and refresh the page i.e., http://localhost:9000"  now the projects will be shown
* it will say2 issue that is constructor should be added.add it and run it then start sonar runner.bat once again and it tries to analyze the source code once again