Name: Bhavesh Kewalramani

Roll No.: A-25

Section: A

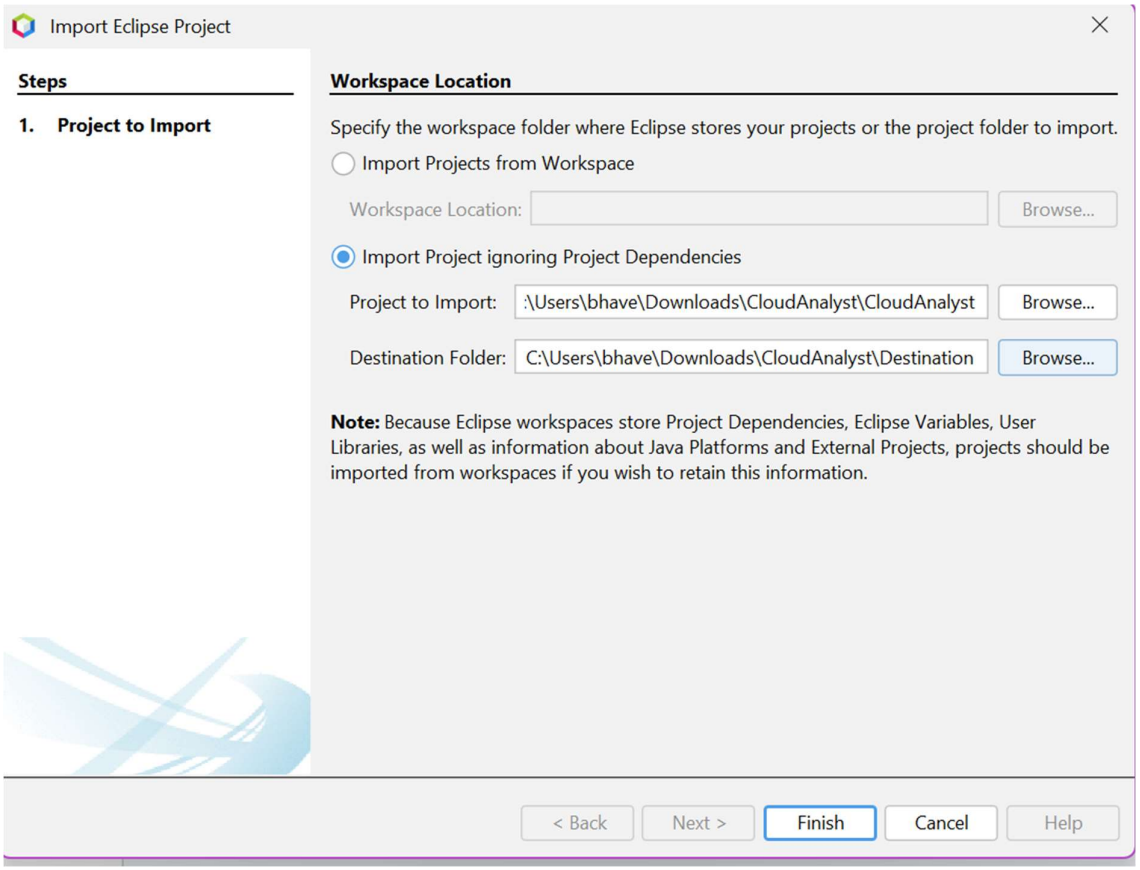
Semester: VII

Shift: I

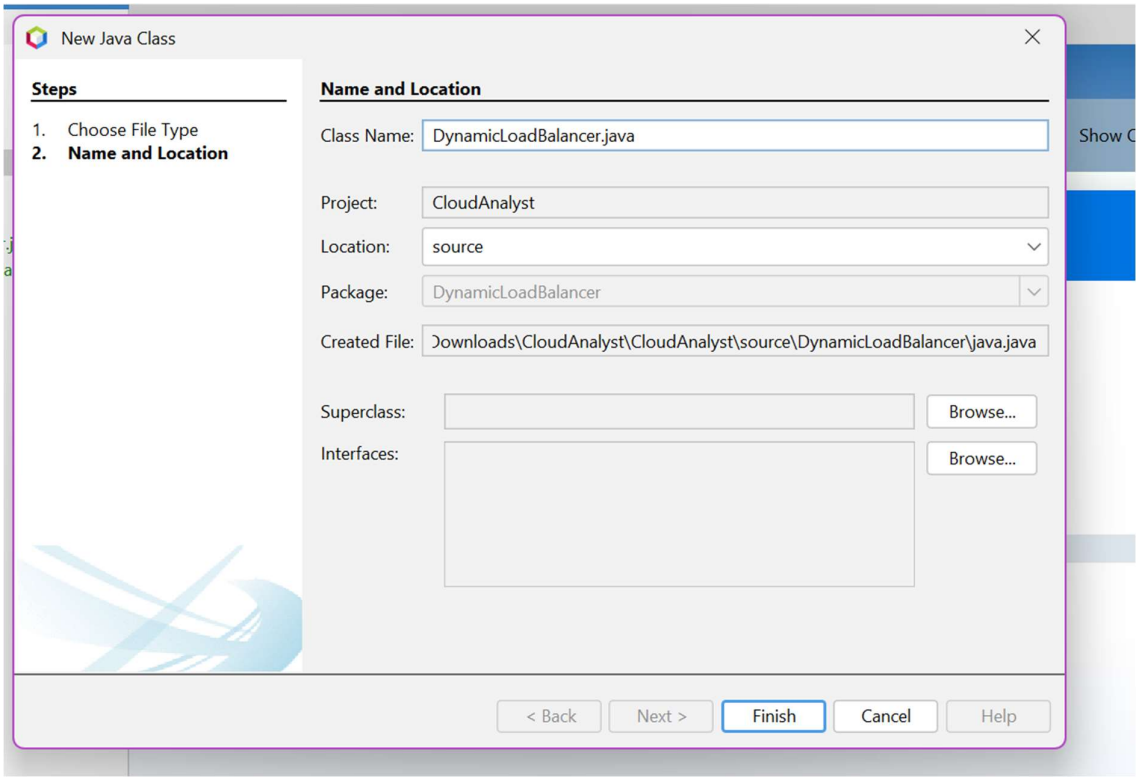
Batch: A1

Aim: To simulate load balancing algorithms using CloudAnalyst.

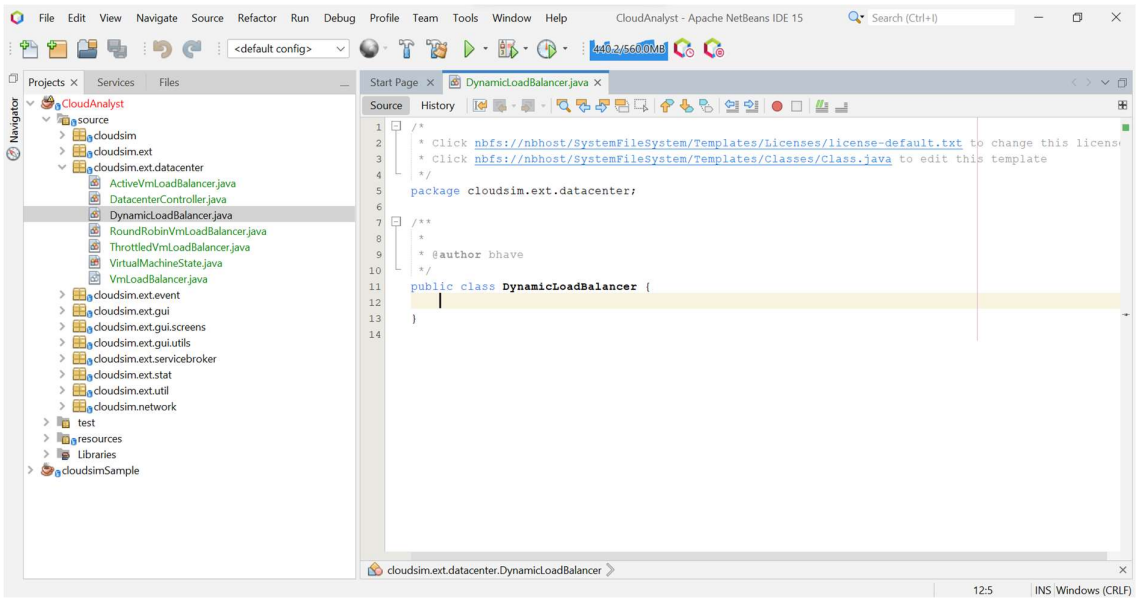
Outputs:



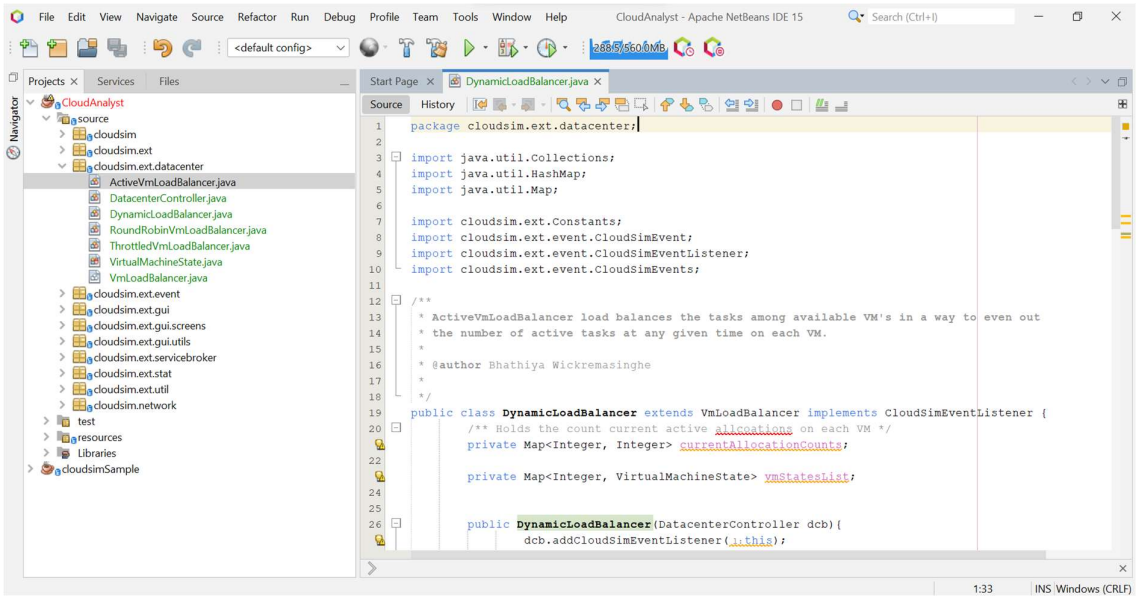
Download the CloudAnalyst zip file from its official site and extract it. Import the folder in NetBeans IDE and then click finish.



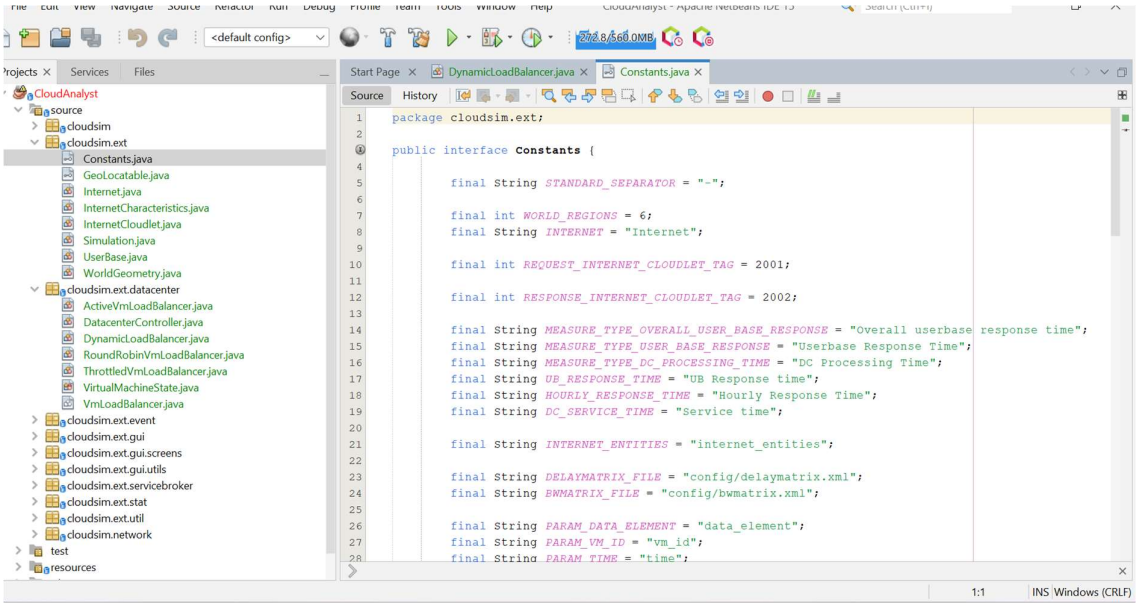
Now create a file DynamicLoadBalancer in Java in the Source folder in CloudAnalyst Project



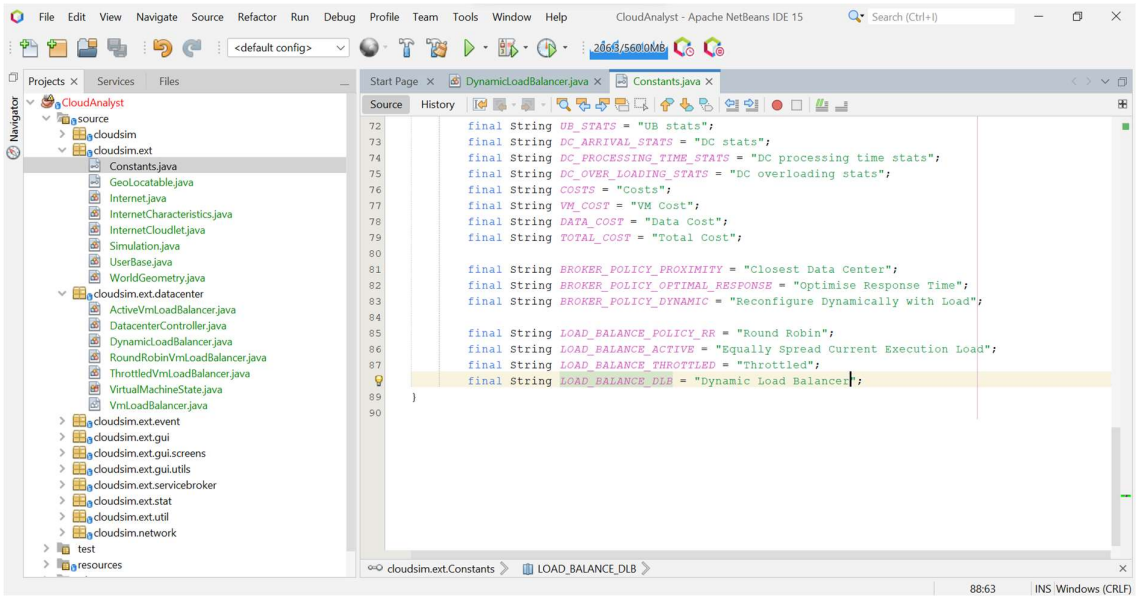
The class will be created as above.



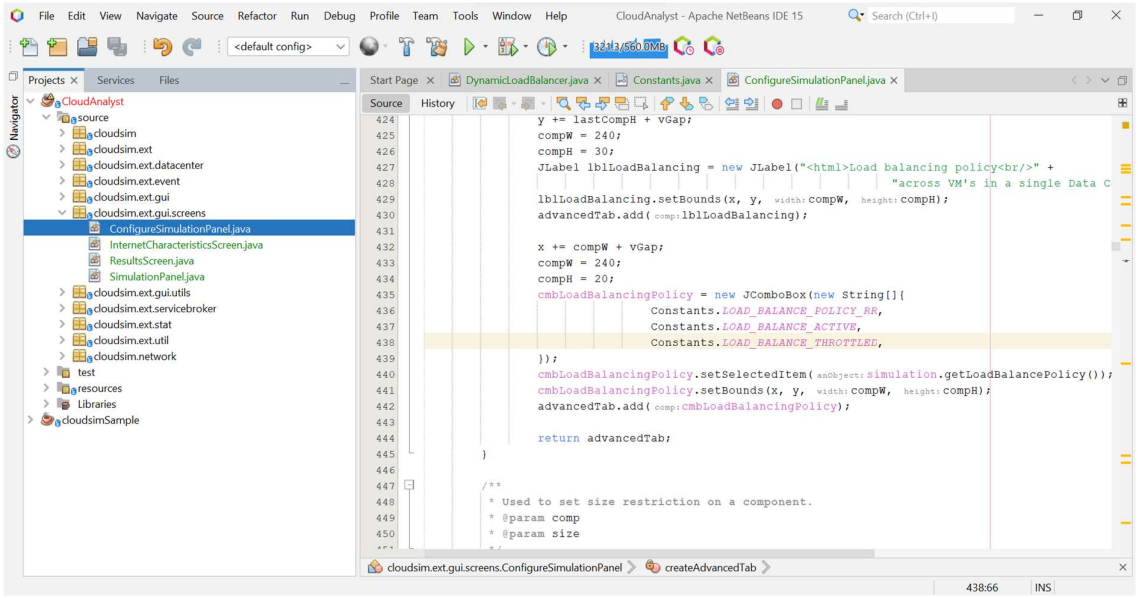
Copy the code from any present files in the same package but rename the class as same as name of the file



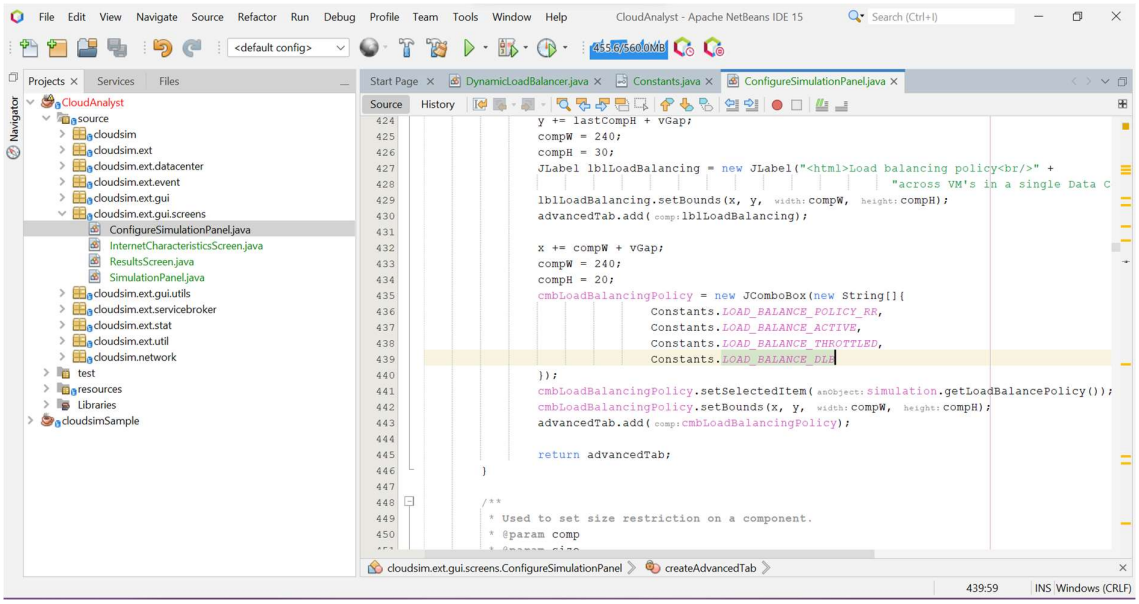
This are the constants already present in the Constants.java file



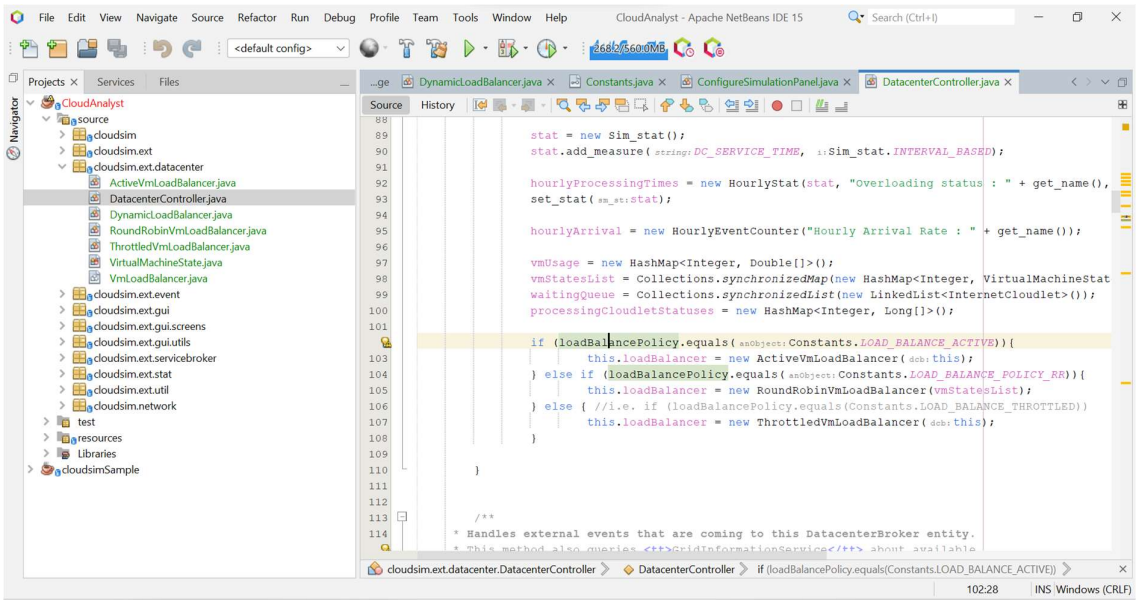
Create an constant LOAD_BALANCE_DB and assign the value in Constants.java file



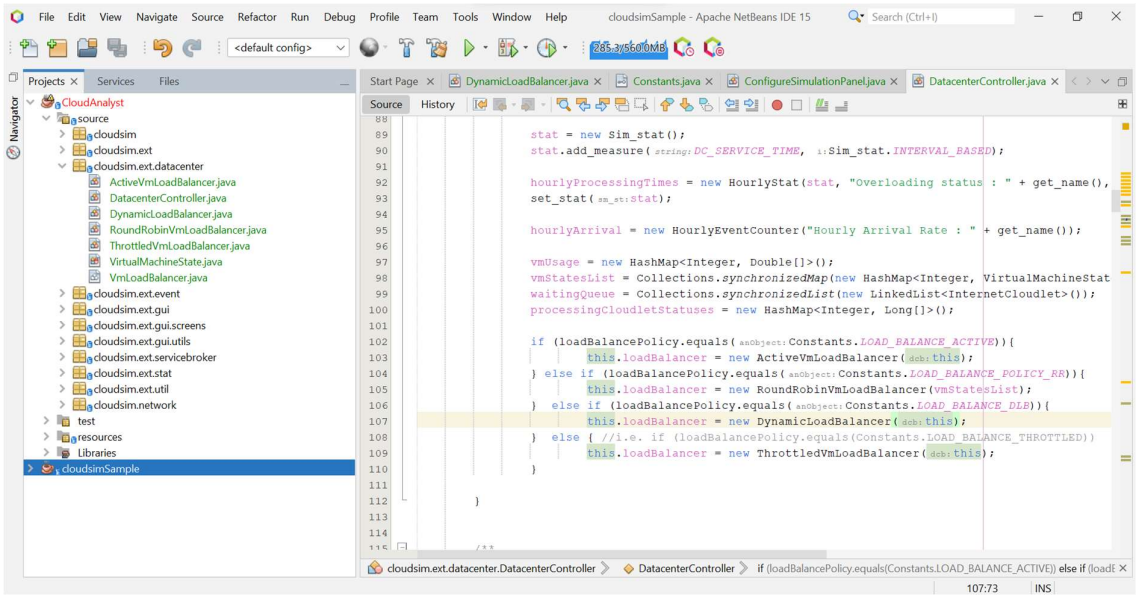
Now we navigate to ConfigureSimulationPanel.java in cloudsim.ext.gui.screens package and add the constant created earlier



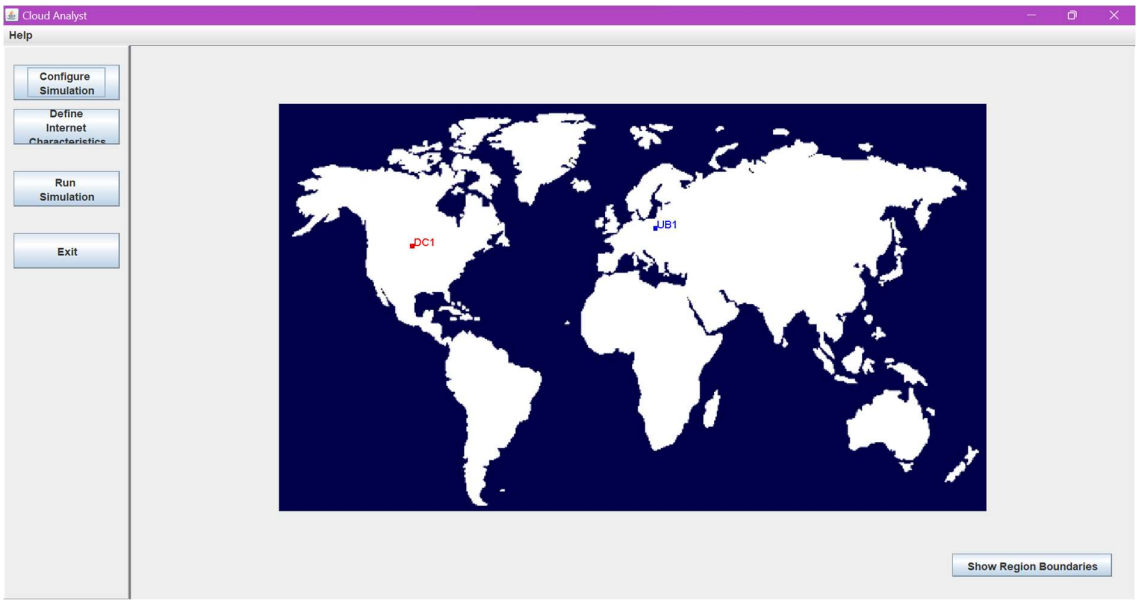
We have added the constants something as shown above



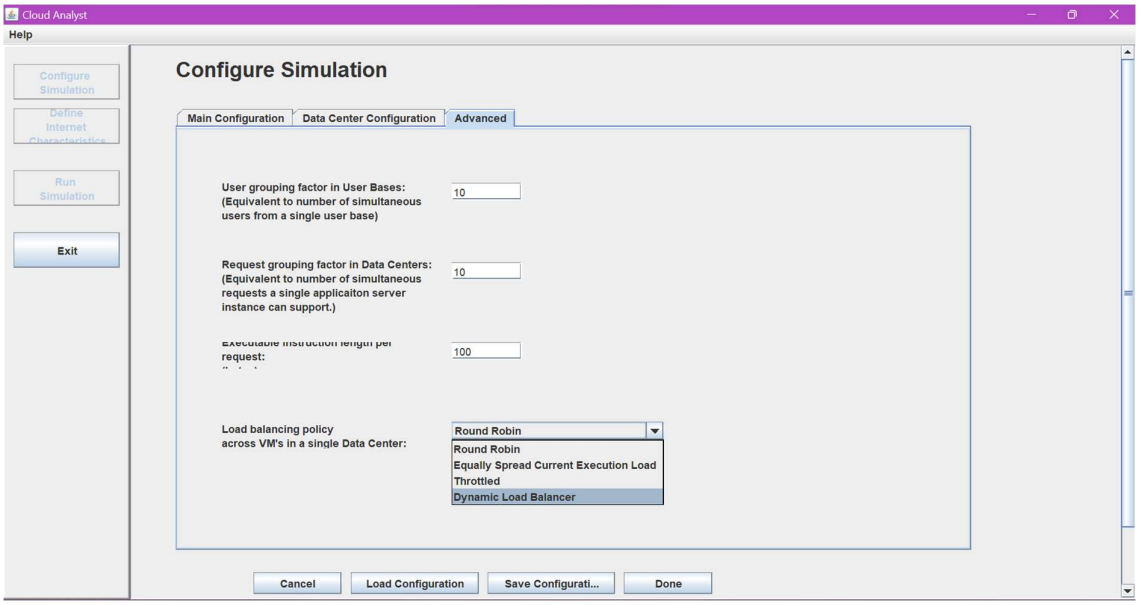
Now navigate to DatacenterController.java and add the code



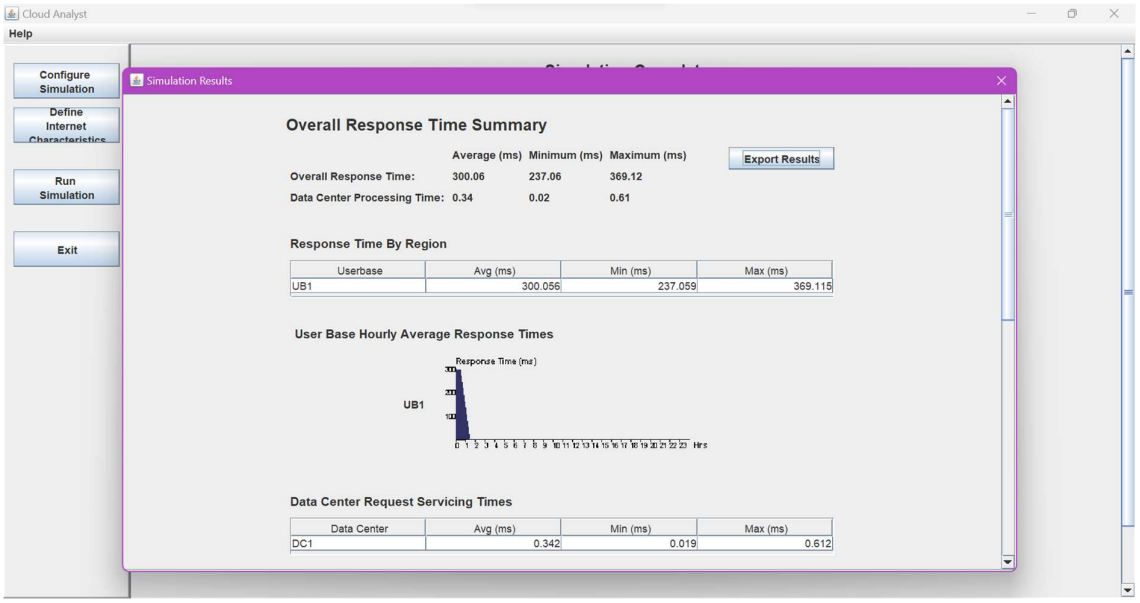
After code has been added it will look something like above



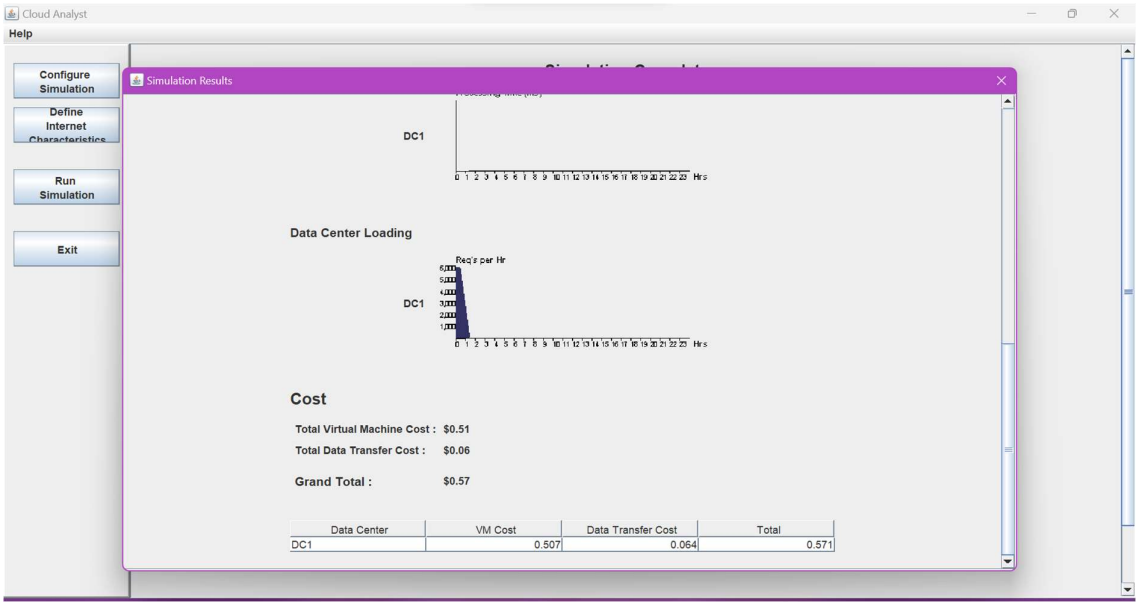
Now run the code and it will show the output something like this. The GUI has been created



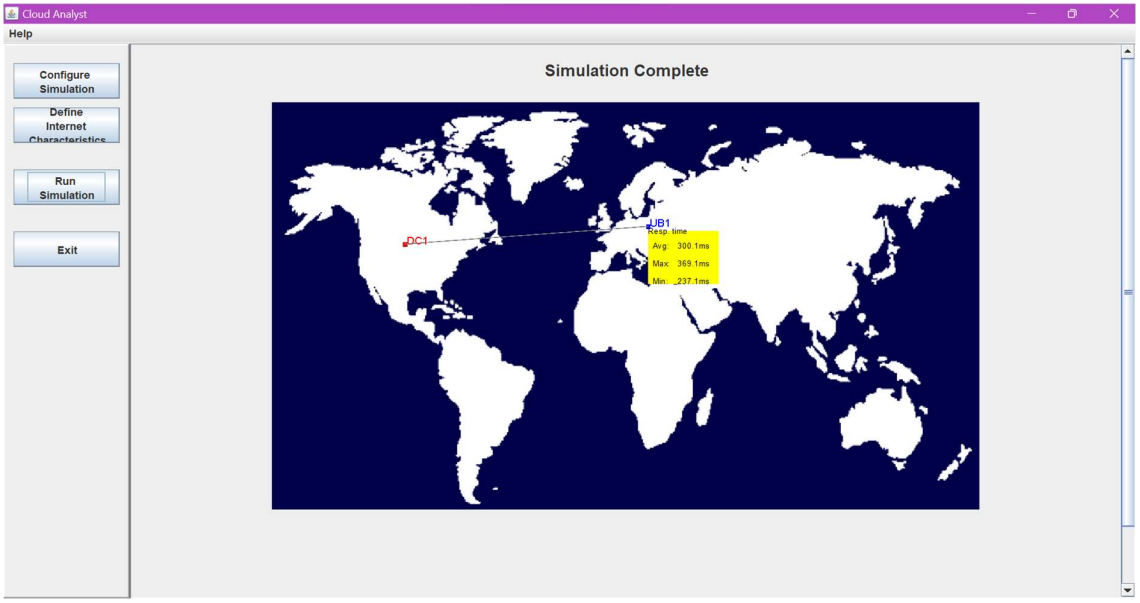
When we click on the Configure simulation option in GUI and navigate to advanced. We scroll down to Load Balancing Policy Option and in the drop down we can now see the option of the policy we created now



We can also see the other details like Datacenter processing time, Hourly Average Response Times, etc



We can also see the estimated cost of the Datacenter and VM with total cost



The map is shown with the datacenter created in a location along with transfer time

Conclusion:

In this practical, we saw the CloudAnalyst tool and how it is used to implement load balancing policy. With the help of GUI we can understand the concept easily.