

DEPARTMENT OF COMPUTER SCIENCE  
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON

Name Badhe Rohan V<sup>ikas</sup>  
Expt. Title Study & do the configuration of cloudsim Also execute  
Class SYMCA Batch 31 & check the performance of existing algorithm  
Roll No. 04 Expt. No. 1 Submitted on 26/1  
Remarks Returned on

Step 1:- First Install Netbeans

Step 2 :- Then download zip file of cloudsim

Step 3 :- Open Netbeans → click New Project →  
Java with Ant → Java application → project name →  
Practical 1

Step 4 :- Go to the Cdrive → create new Folder → name →  
lib → Paste cloud sim library in this folder

Step 5 :- Import the cloud sim library.

Step 6 :- Right click on Practical 1  
→ set configuration → customize →  
libraries → compile → classpath →  
add jars → cloudsim 8.0.3 jar → ok

Step 7 :- Run

See

**DEPARTMENT OF COMPUTER SCIENCE  
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON**

Name Badhe Rohan Vikas

Expt. Title Install a Cloud Analyst & Integrate with Eclipse/

Class SYMCA Netbeans met monitor the performance of Existing algorithm

Batch B1 Performed on \_\_\_\_\_

Roll No. 04 Expt. No. 2 Submitted on 3/2

Remarks \_\_\_\_\_ Returned on \_\_\_\_\_

Step 1 :- Download cloud Analyst zip file from cloud folder

Step 2 :- Add zip file in c-drive → lib → cloud Analyst

Step 3 :- Go to netbeans → open project → This PC → c-drive → lib → Cloud analyst → click on Cloud analyst → open project

Step 4 :- Cloud analyst → Source package → click on Cloud sim eat gui → GUI main.java → double click → run GUI main.java file

Step 5 :- Config" simulation → Add new → nonfigure → also add datacenter configuration → Save configuration

Step 6 :- Name that new configure → config 2.sim → Save it → Done.

Step 7 :- Run simulation → Open window overall response time summary → Display detailed Results.

✓ See

**DEPARTMENT OF COMPUTER SCIENCE  
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON**

Name: Badhe Rohan Vikas

Expt. Title: Modify or propose a new load balancing algorithm compatible with cloud Analyst

Class: SEMIN Batch: B1 Performed on

Roll No. 04 Expt. No. 3 Submitted on

Remarks: \_\_\_\_\_ Returned on \_\_\_\_\_

Modify or propose a new load balancing algorithm compatible with Cloud Analyst

**Step 1 :- How to add load balancing policy in Cloud analyst  
OR**

**Step 2 :- How to change GUI OR**

**Step 3 :- How to add your own load balancing Policy / or algorithm in Cloud Analyst.**

**Step 4 :- Cloud Analyst setup & Adding load balancing Policy.**

**Step 5 :-**

- 1) Download ~~de~~cloudAnalyst
- 2) Import to eclipse
- 3) Add your algorithm

**Follow this steps:-**

1). Now run Cloud analyst.

2) currently three load ~~balancing~~ Policy in dropdown

3) Now let add another load balancing Policy.

i). a) create your own algorithm under  
Cloudsim.ext.datacenter, call it  
`DynamicCloudBalancer.java`.

b) Create String in `constant.java` Under Cloudsim  
Call it `LOAD_BALANCE_DLB`

c) Add load balancing Policy in `Configresimulationfunel.java`  
under `Cloudsim.ext.gui.screen`.line:995

d) Add load balancing Policy (which you want to  
simulate) to else condition in `Datacentercontroller.java`  
under `Cloudsim.ext.datacenter` line:9102

e) Run

5) Now you can see there are 4 algorithm in dropdown.

DEPARTMENT OF COMPUTER SCIENCE  
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON

Name Badhe Rohan 19Kas  
Expt. Title Creating a warehouse Application in salesforce.com  
Class SYMCIA Batch B1 Performed on \_\_\_\_\_  
Roll No. 04 Expt. No. 6 Submitted on 30/08/2023  
Remarks \_\_\_\_\_ Returned on \_\_\_\_\_

Step 1:-

Click on Setup → Create → Objects → New Custom Object.

Label :- mySale

Polar Label :- MySale

Object Name :- mySale

Record Name :- mySale Description

Data Type : Text

→ Click on Save

Step 2:-

Under mySale Go to custom Field & Relationships →

Click on new custom field.

Creating 1<sup>st</sup> field :-

→ Select data type as Auto Number → Next

→ Enter the details → Field Label : PROD-ID →

Display Format : MYS-{0000} → Starting Number : 1001

→ Field Name : PRODID → Next → Save & New

Creating 2<sup>nd</sup> field :-

→ select Data type as Date → Next → Enter the details

→ Field label : Date of sale → Field Name : Date\_of\_Sale

→ Default value : Today() - 1 → Next → Save & New

Creating 3<sup>rd</sup> field :-

→ Select data type as Number → Next → Enter the details

→ Field label : Quantity Sold → Length : 3

→ Decimal places : 0 → Default value : Show Formulae

Editor : L → Next → Save & New

### Creating 4<sup>th</sup> Field:-

- select data type as currency → next → Enter the Details
- Field label : Rate → Field Name : Rate → Length : 4 →
- Decimal Places : 2 → Default Value : 10 → Next → Save new

### Creating 5<sup>th</sup> Field:-

- Select Data type as currency → Next → MySale field
- Quantity\_Sold\_C + Rate\_C → Next → Save

### Step 3:-

#### Now Create an Application :-

~~Step 3~~ Setup → Create → App → New → MyShop → Next → Select an Image → Next → Add object Mysale.

### Step 4:-

#### Now Create on Tab:-

- ~~Step 4~~ Setup → Create → Tab → New custom Tab → Choose MySale object → Select tab style → save
- \* On the top in the tab bar you can see the tab which has been created by you. Click on tab you can see your obj is opened just click on new button & provide the details. ~~Ment~~

~~Sell~~

**DEPARTMENT OF COMPUTER SCIENCE  
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON**

Name Badhe Rohan Vikas  
Expt. Title Creating an app in salesforce.com using Apex programming language  
Class SYMCA Batch B4 Performed on \_\_\_\_\_  
Roll No. 04 Expt. No. 7 Submitted on 3/12  
Remarks \_\_\_\_\_ Returned on \_\_\_\_\_

**Step 1 :-**

Log into your sandbox or Developers organization  
Click on setup → Create → objects → new custom objects  
Enter book for label.  
Enter Books for plural label  
Click Save.

**Step 2 :-**

Now let's create a custom field

In the custom field & relationship section of the Book object click new.

Select Number for the datatype & next.

Enter price for the field label.

Enter 16 in the length text box.

Enter 2 in the decimal place & next... Next -- Save.

**Step 3 :-**

Click setup → Develop → Apex Classes & click new

In the class Editor enter this class

Public class MyHelloWorld {

    Public static void applyDiscount (Book.c[] books)

    {  
        for (Book c : books)  
            c.b.price = c.b.price \* 0.9;  
    }

2  
3

**Step 4 :-**

Add a trigger

A trigger is a piece of code that can execute objects before or after specific data manipulation language events occurred.

isting



Scanned with OKEN Scanner

Click on setup → Create → objects → Click the object, you have created ex:  
Book Scroll down you can see Trigger click on new

In the trigger Editor enter this class  
trigger HelloWorldTrigger on Book C (before insert)

```
{  
    Book_C [] Books = Trigger.new;  
    MyHelloWorld.appl.y.Discount(books);  
}
```

Step 5 :-

Click on Setup → Create → tabs → new custom tab → Choose Books → next & next & save.

Click on tab Books → new → insert a name for Book → insert price for that book → click on save.

Save

DEPARTMENT OF COMPUTER SCIENCE  
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON

Name Badhe Rohan V<sup>o</sup>kas  
Expt. Title Implementation of soap web services in C# / Java application  
Class SYMCA Batch B1 Performed on \_\_\_\_\_  
Roll No. 04 Expt. No. 8 Submitted on 3/10/2023  
Remarks \_\_\_\_\_ Returned on \_\_\_\_\_

Step 1 :- Start visual studio

Step 2 :- Select File → New → website

Step 3 :- Select Asp.net web services.

Step 4 :- Add following code.

[web method]

```
Public int add (int a, int b)  
{
```

```
    return a+b;
```

```
}
```

Step 5 :- Test your web service by pressing F5 button on keyboard.

Step 6 :- Click on add

Step 7 :- Give (fill) values of parameters.

Step 8 :- Click on Invoke button

Step 9 :- Output is shown on your browser window.

Seez

1

DEPARTMENT OF COMPUTER SCIENCE  
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON

Name Badhe Rohan Vikas  
Expt. Title Implementation of Paravirtualization using VM mode  
Class SYMCA      Batch B1      Performed on workstation/oracle virtual Box guest OS  
Roll No. 04      Expt. No. 9      Submitted on 30  
Remarks \_\_\_\_\_

Aim:- Implementation of virtual Box for virtualization of any OS.

\* Starting virtual Box! -

■ After installation you can start virtual Box as follows:-

- On a windows host, in the standard "Programs" menu, click on the item in the "VirtualBox" group. On Vista or windows 7, you can also type "VirtualBox" in the search box of the "Start" menu.
  - on a mac os x host, in the finder, double click on the "VirtualBox" item in the "Application" folder
  - on a linux or solaris host, depending on your desktop environment, a "VirtualBox" item may have been placed in either the "System" or "System Tools" group of your "Applications" menu.
- When you start VirtualBox for the first time, a window like the following should come up:

\* Creating your first virtual machine! -

- Click on the "New" button at the top of the VirtualBox Manager window. A wizard will pop up to guide you through setting up a new virtual machine (VM).
- For "Operating System Type", select the operating system that you want to install later. The supported OS are grouped: if you want to install something very unusual that is not listed, select "Other".
- On the next page, select the memory (RAM) that VirtualBox should allocate every time the virtual machine is started.

ng

(1)

<b>DEPARTMENT OF COMPUTER SCIENCE</b>					
<b>INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON</b>					
Name	Badhe Ratan Vilas				
Expt. Title	Installation & Configuration of Hadoop				
Class	SYMCA	Batch	1	Performed on	
Roll No.	04	Expt. No.	10	Submitted on	<i>20/01/2023</i>
Remarks					
Returned on					

Steps !- of JDK installation:-

- 1) You need to install Java since Hadoop is based on it.
- 2) Java download.

To download java, you must have account on oracle, if not then create account & download.

- 3) Install to C:\Program Files(x86)\Java\jre1.8.0\_351

- 4) Java Environment variable Configuration

\* type "Edit the system environment variables" in windows Search bar & select.

\* In system properties  $\Rightarrow$  Environment Variables  $\Rightarrow$  In system variable  $\Rightarrow$  New  $\Rightarrow$  Create new JAVA\_HOME Variable  $\Rightarrow$  Variable = C:\Program Files(x86)\Java\jdk1.8.0\_351  $\Rightarrow$  OK

\* System variable  $\Rightarrow$  Path  $\Rightarrow$  Edit  $\Rightarrow$  New  $\Rightarrow$  C:\Program files(x86)\Java\jdk1.8.0\_351\bin

Steps of Hadoop File System Configuration.

- 1) Install Hadoop from official website
- 2) Extract download.tur File where your Java \ jdk is installed.

Now you have Java & Hadoop Folders in the same location

\* Hadoop configuration! -

Need to configure some Hadoop files.

1) C:\Program File(x86)\hadoop-3.2.2\etc\hadoop

There will be five files.

a) core-site.xml

b) Hadoop-env.cmd

c) hdfs-site.xml

d) mapred-site.xml

e) yarn-site.xml

open these five file open one by one in preferred text editor.

ting

a) In core-site.xml , you need to set the default Hadoop file location inside <configuration> tag

```
<Property>
  <name> fs.defaultFS </name>
  <value> hdfs://localhost:9000 </value>
</Property>
```

b) In hadoop env cmd , you need to provide the path to 'Java'

\* set JavaHome = C:\Program File(x86)\Java\jdk8.0-35

c) hdfs-site.xml =

create new Folder in to hadoop main directory ( data )

Inside data Folder → create two Folder namenode & datanode

Provide the Path of these two file to the hdfs-site.xml

Add following code & change Path of datanode & name node

```
<Property>
```

```
  <name> dfs.replication </name>
  <value> 1 </value>
```

```
</Property> <Property>
```

```
  <name> dfs.namenode.name.dir </name>
```

```
  <value> C:\Program File(x86)\hadoop 3.2.2\data\name </value>
```

```
</Property> <Property>
```

```
  <name> dfs.datanode.data.dir </name>
```

```
  <value> C:\Program File(x86)\hadoop 3.2.2\data\datanode </value>
```

```
</Property>
```

d) mapred-site.xml :-

You need to set yarn as the MapReduce Framework  
code :-

```
<Property>
```

```
  <name> mapreduce.framework.name </name>
```

```
  <value> yarn </value>
```

```
</Property>
```

\* save file

DEPARTMENT OF COMPUTER SCIENCE  
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON

Name Bodhe Rohan Vikas

Expt. Title Installation & configuration of Hadoop

Class SYMCA Batch B1 Performed on \_\_\_\_\_

Roll No. 10 Expt. No. 10 Submitted on \_\_\_\_\_

Remarks \_\_\_\_\_ Returned on \_\_\_\_\_

e) `yarn-site.xml` :-  
code

```
<property>
<name>yarn.nodemanager.aux-services</name>
<value>mapreduce-shuffle</value>
</property><property>
<name>yarn.nodemanager.ouservices.
mapreduce.shuffle.class</name>
<value>org.apache.hadoop.mapred.ShuffleHandler
</value>
</property>
```

\* Hadoop Environment variable configuration.

Search "Edit the system environment variables"  
in windows search bar.

\* open Environment variable  $\Rightarrow$  system variable  $\Rightarrow$  new  $\Rightarrow$   
Create HADOOP\_HOME Variable & variable name = C:\  
Program File (x86)\hadoop 3.2.2

\* System Variables  $\Rightarrow$  Path  $\Rightarrow$  edit  $\Rightarrow$  C:\program files  
(x86)\hadoop 3.2.2\sbin  $\Rightarrow$  ok

\* fix of Hadoop 'bin' folder

You need to replace bin folder with another bin folder  
which already contains all the files Property configured  
Download compressed file then delete bin Folder Decompress

hadoop 3.2.2 Configuration File.ZIP

\* Hadoop Installation verification.

Open CMD  $\Rightarrow$  (run as administrator)

You need to go Slin Folder copy path & enter in  
CMD with CD command.

$\rightarrow$  Type start - all.cmd.

*Ser*