



VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Principles of Cloud Computing
CSE3035

Lab Assignment 3-
Cloudsim setup using Eclipse IDE

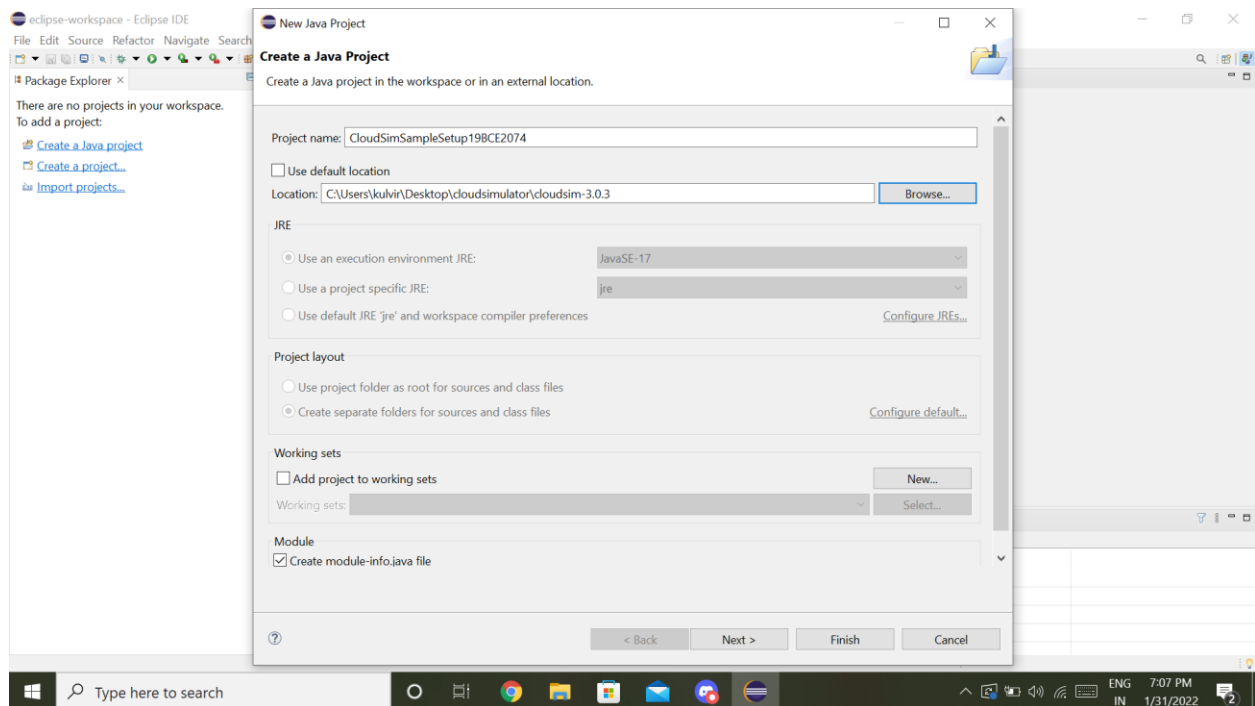
Slot : L11+L12

Name : Kulvir Singh

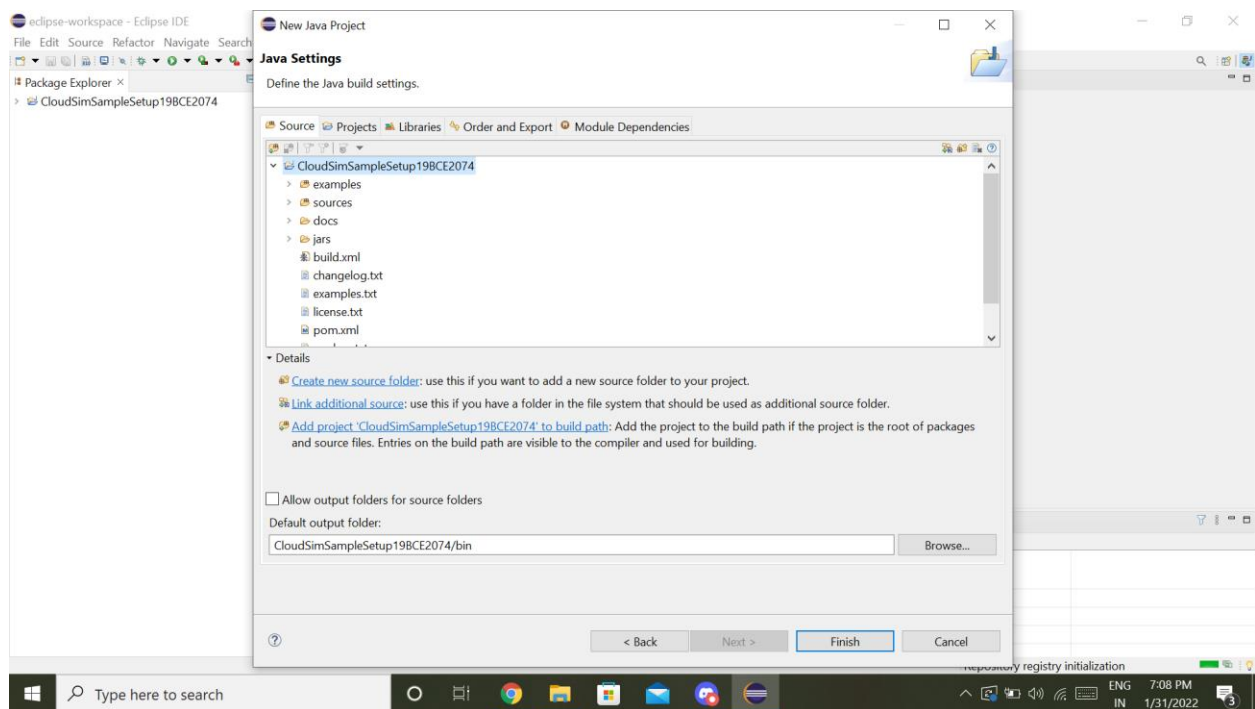
Register Number : 19BCE2074

Step 1 : Create a new Java Project in Eclipse IDE

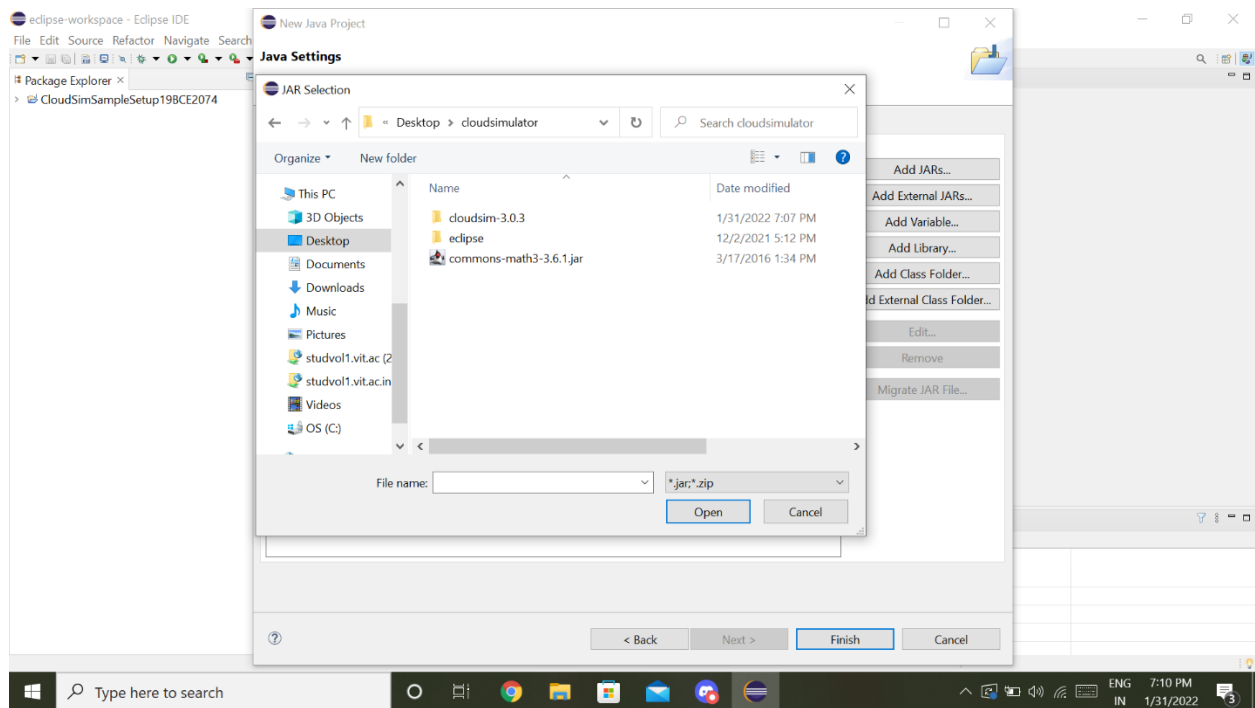
Select the default location to be the cloudsim-3.0.3 folder



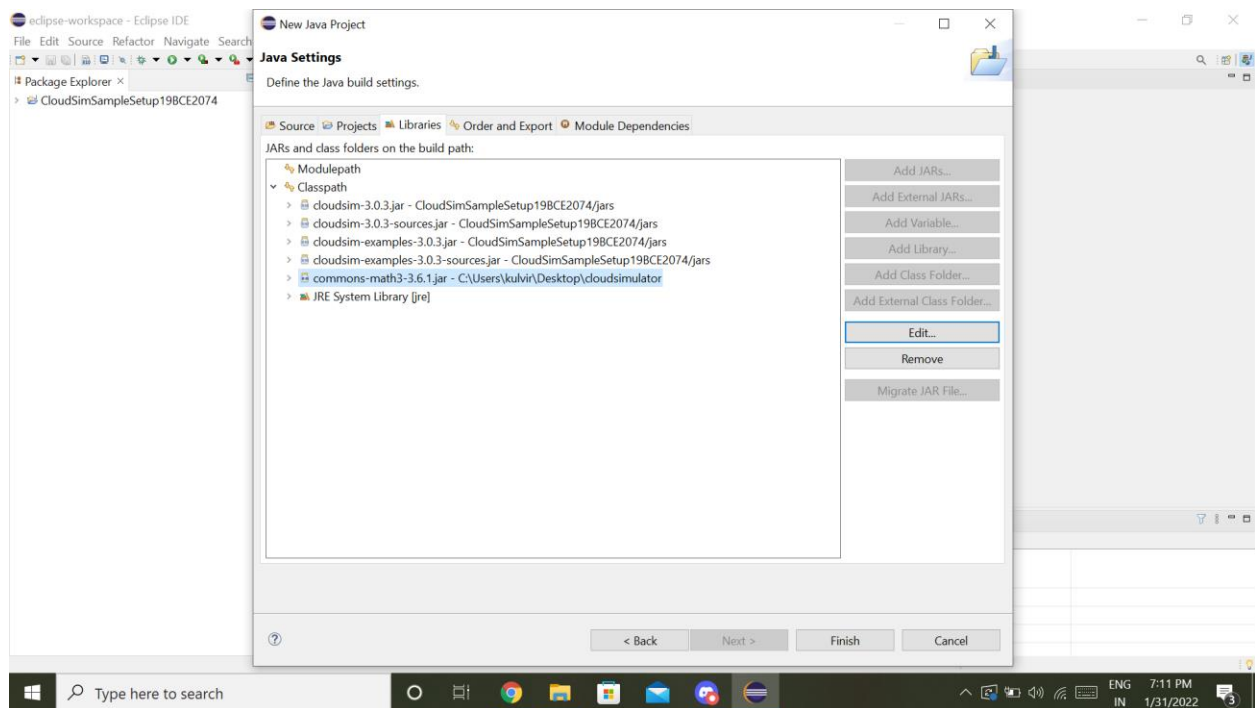
Step 2 : Press Next to add an external library



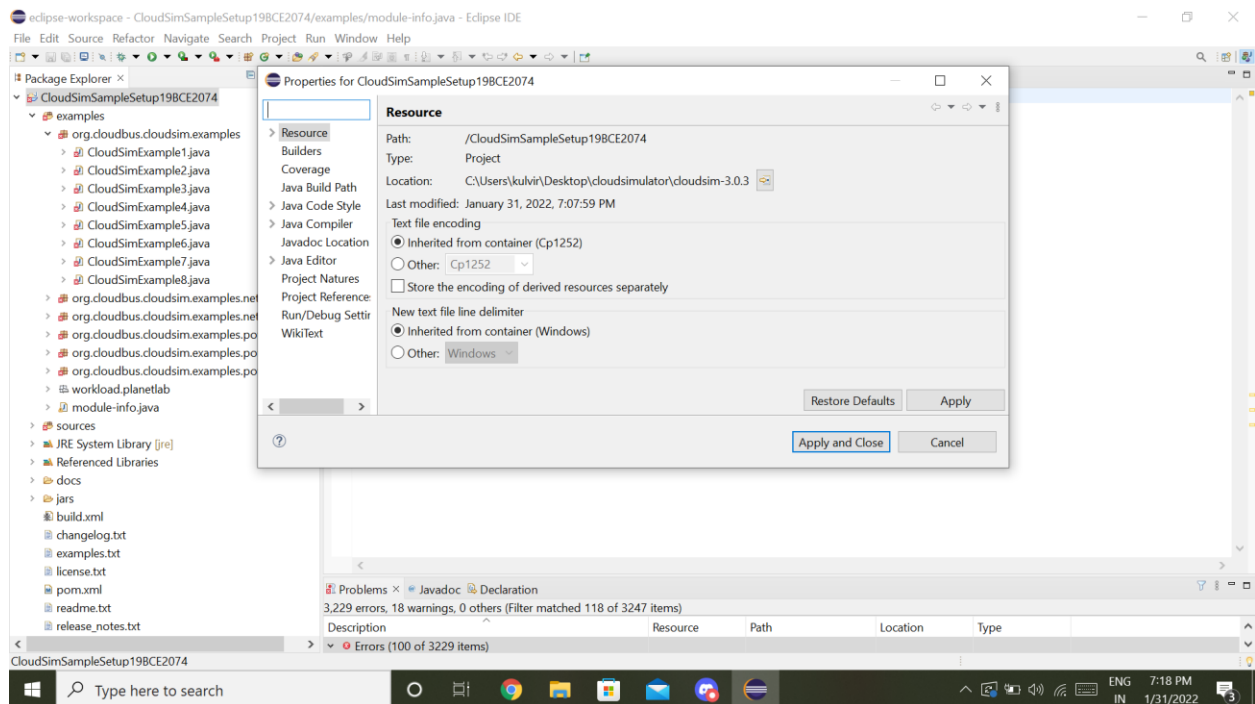
Step 3: Select the commons-math3-3.6.1.jar file and add that to the libraries of the project



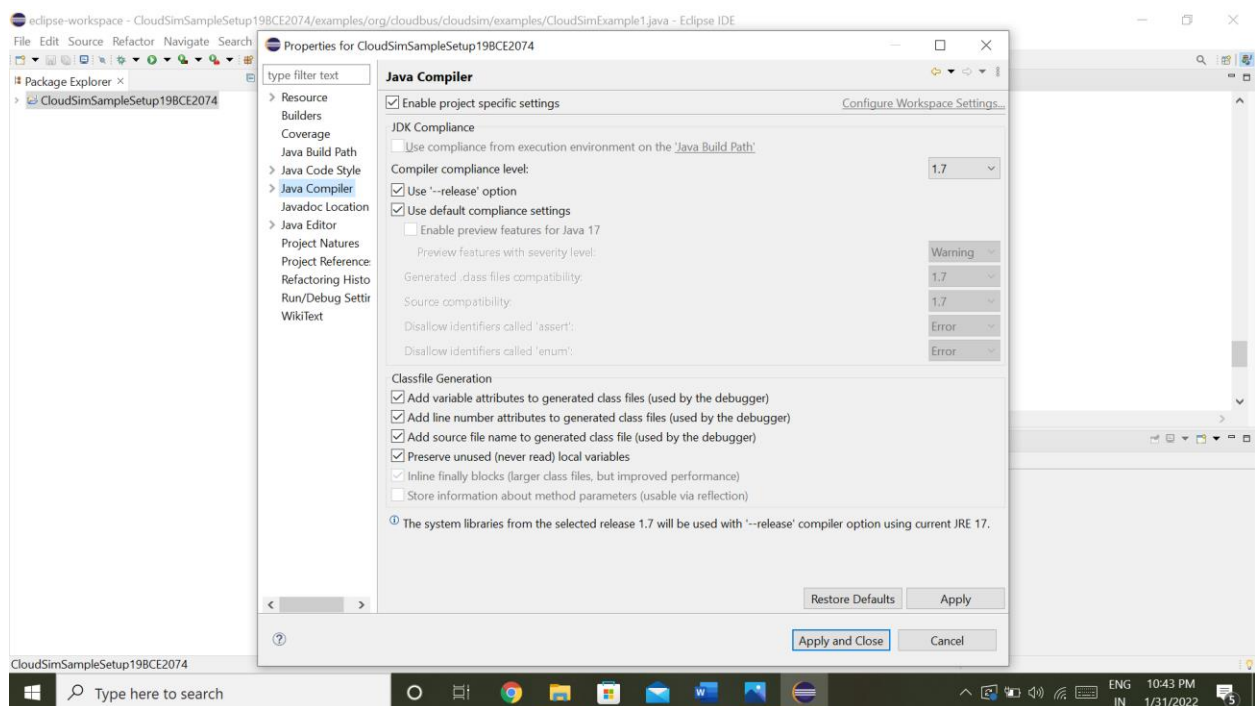
The file has been added.



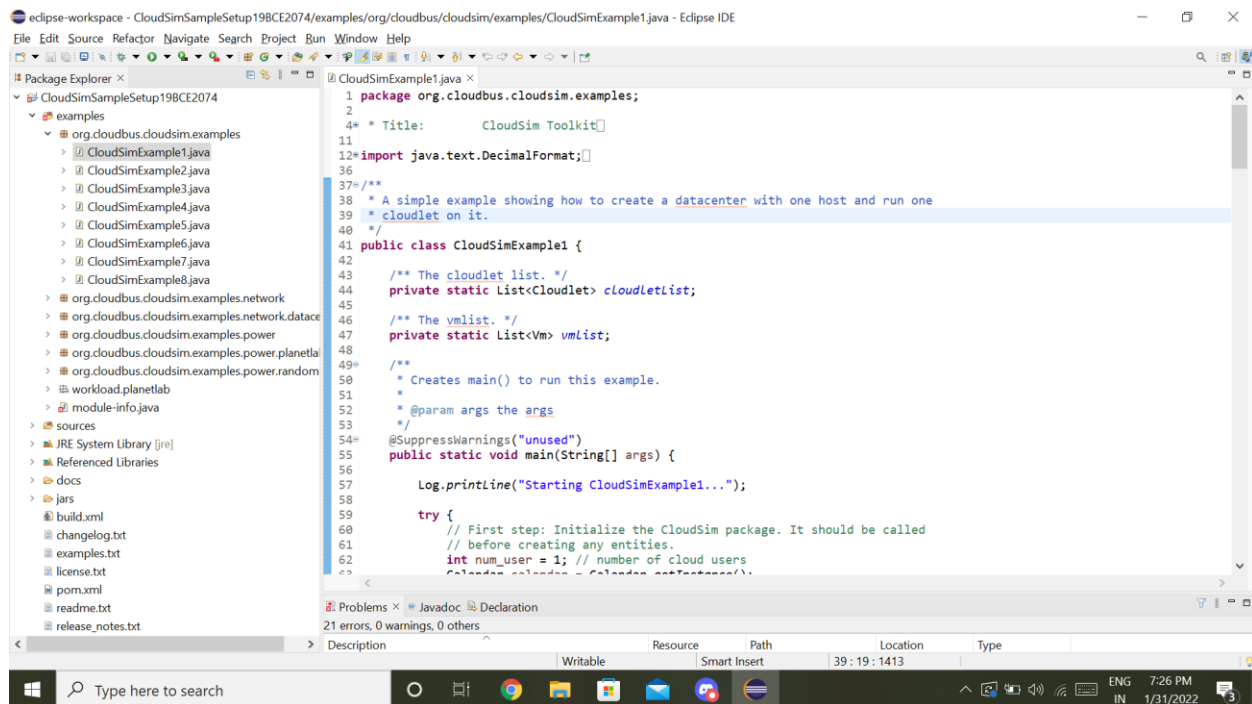
Step 4: Configure the project by right clicking the project name and go to properties



Step 5: Go to Java Compiler and select JDK Compliance as 1.7 and hit apply

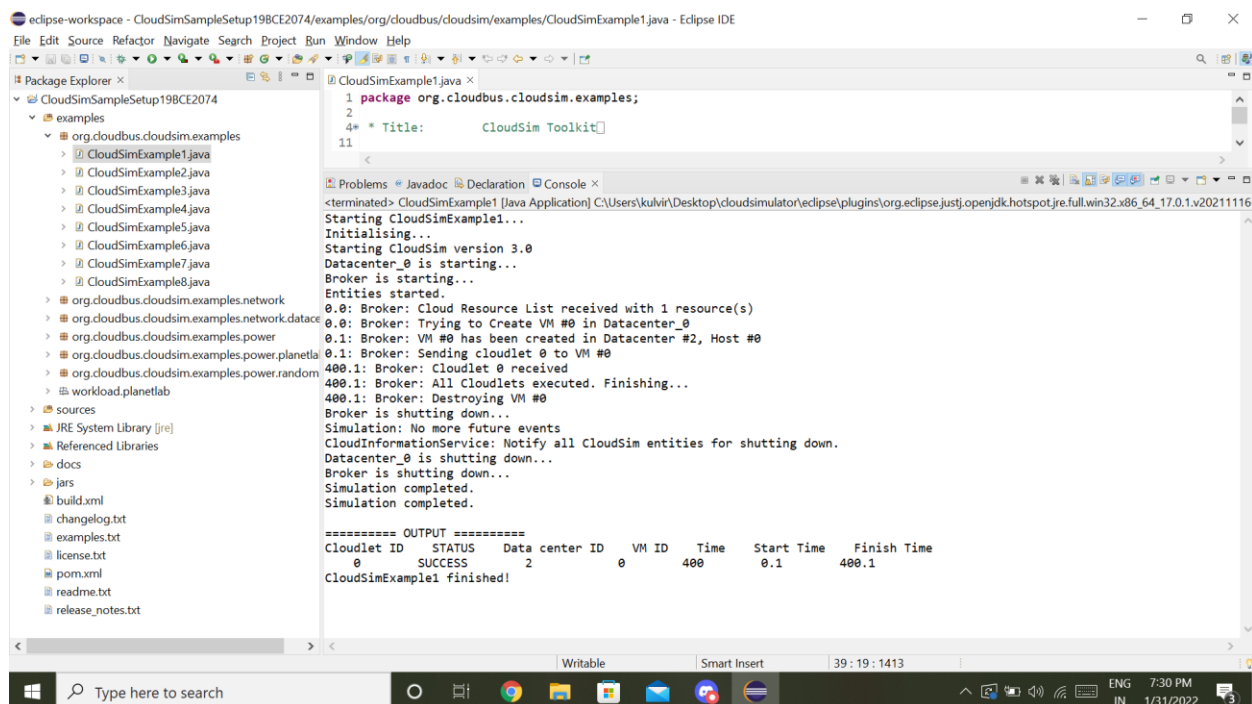


Step 6: The previous steps remove the errors and your code is ready for execution. Use example code 1 for checking the working state of the application.



```
1 package org.cloudbus.cloudsim.examples;
2
4 * Title:      CloudSim Toolkit
11
12 import java.text.DecimalFormat;
36
37 /**
38  * A simple example showing how to create a datacenter with one host and run one
39  * cloudlet on it.
40  */
41 public class CloudSimExample1 {
42
43     /** The cloudlet list. */
44     private static List<Cloudlet> cloudletList;
45
46     /** The vmlist. */
47     private static List<Vm> vmList;
48
49     /**
50      * Creates main() to run this example.
51      *
52      * @param args the args
53      */
54     @SuppressWarnings("unused")
55     public static void main(String[] args) {
56
57         Log.println("Starting CloudSimExample1...");
58
59         try {
60             // First step: Initialize the CloudSim package. It should be called
61             // before creating any entities.
62             int num_user = 1; // number of cloud users
63             Calendar calendar = Calendar.getInstance();
```

Step 7: We run the code.
OUTPUT SCREENSHOT:



```
<terminated> CloudSimExample1 [Java Application] C:\Users\kulvir\Desktop\cloudsimulator\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-
Starting CloudSimExample1...
Initialising...
Starting CloudSim version 3.0
Datacenter_0 is starting...
Broker is starting...
Entities started.
0.0: Broker: Cloud Resource List received with 1 resource(s)
0.0: Broker: Trying to Create VM #0 in Datacenter_0
0.1: Broker: VM #0 has been created in Datacenter #2, Host #0
0.1: Broker: Sending cloudlet 0 to VM #0
400.1: Broker: Cloudlet 0 received
400.1: Broker: All Cloudlets executed. Finishing...
400.1: Broker: Destroying VM #0
Broker is shutting down...
Simulation: No more future events
CloudInformationService: Notify all CloudSim entities for shutting down.
Datacenter_0 is shutting down...
Broker is shutting down...
Simulation completed.
Simulation completed.

===== OUTPUT =====
Cloudlet ID  STATUS  Data center ID  VM ID  Time  Start Time  Finish Time
0            SUCCESS    2            0      400    0.1         400.1
CloudSimExample1 finished!
```