

Exp No: 8

Date:

## CLOUD SIMULATION

### **IMPLEMENT ROUND ROBIN TASK SCHEDULING IN BOTH TIME SHARED AND SPACE SHARED CPU ASSIGNMENT**

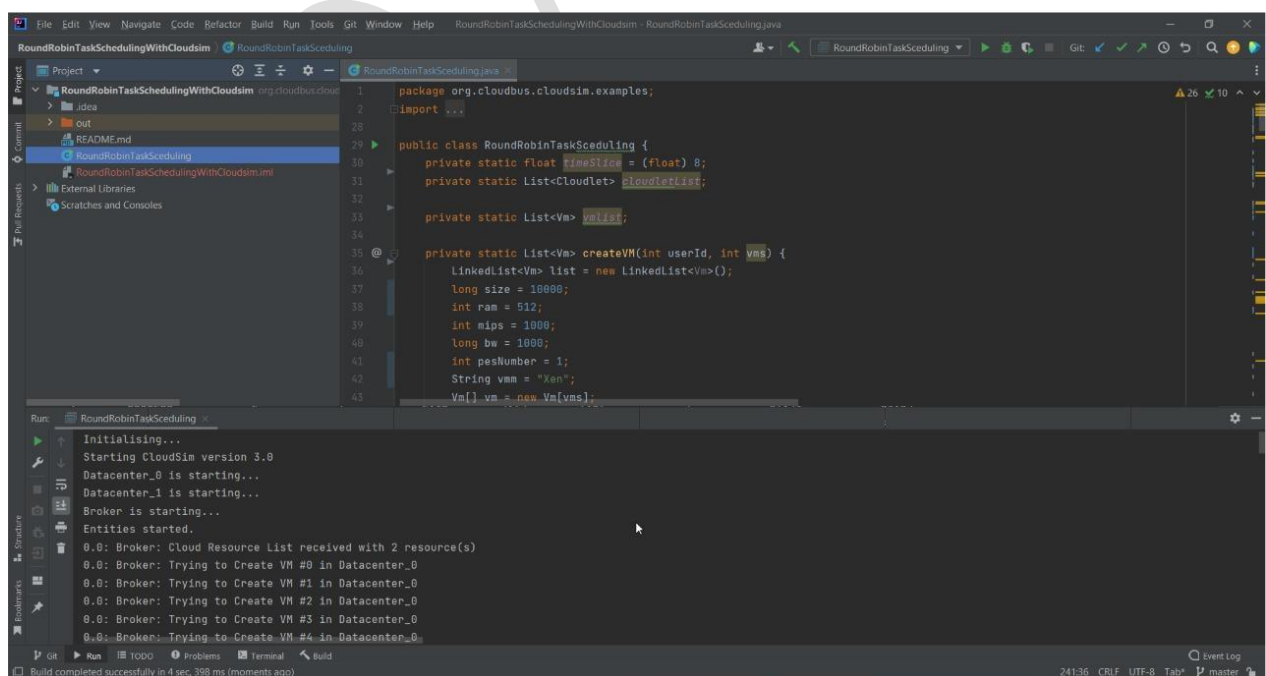
#### **AIM:**

Implement RoundRobin task scheduling in both TimeShared and SpaceShared CPU assignments.

#### **PROCEDURE:**

1. Create a new project by selecting java console line application template and JDK 18.
2. Open project settings from the file menu of the options window.
3. Navigate to project dependencies and select on add external jars and then click on 'Browse' to open the path where you have unzipped the Cloudsim Jars and click on apply.
4. Create a java file with the cloudsim code to implement the Round robin scheduling algorithm.
5. Run the application as a java file to see the output in the console below.

#### **OUTPUT:**



The screenshot displays an IDE window with the file `RoundRobinTaskScheduling.java` open. The code defines a `RoundRobinTaskScheduling` class with a `timeslice` of 8, a `cloudletList`, and a `vmList`. It includes a `createVM` method that initializes VMs with specific parameters like size, ram, mips, bw, pesNumber, and vmm. The console output at the bottom shows the application's execution, starting with 'Initialising...' and 'Starting CloudSim version 3.0'. It then shows the initialization of 'Datacenter\_0' and 'Datacenter\_1', followed by the 'Broker' starting. The output concludes with 'Entities started.' and a series of messages from the broker attempting to create VMs in Datacenter\_0, such as '0.0: Broker: Trying to Create VM #0 in Datacenter\_0' through '0.6: Broker: Trying to Create VM #4 in Datacenter\_0'. The status bar at the bottom indicates the build was completed successfully in 4 seconds and 398 milliseconds.

#### **RESULT:**

Thus Round Robin task scheduling is implemented using cloud simulator.