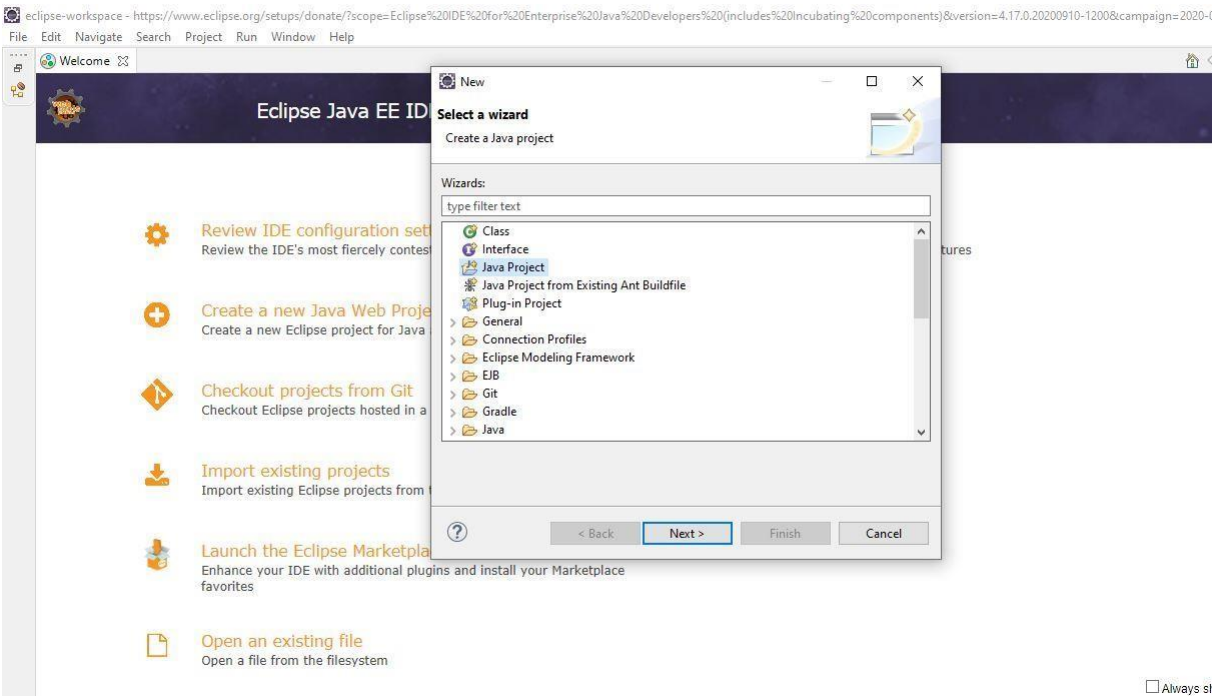
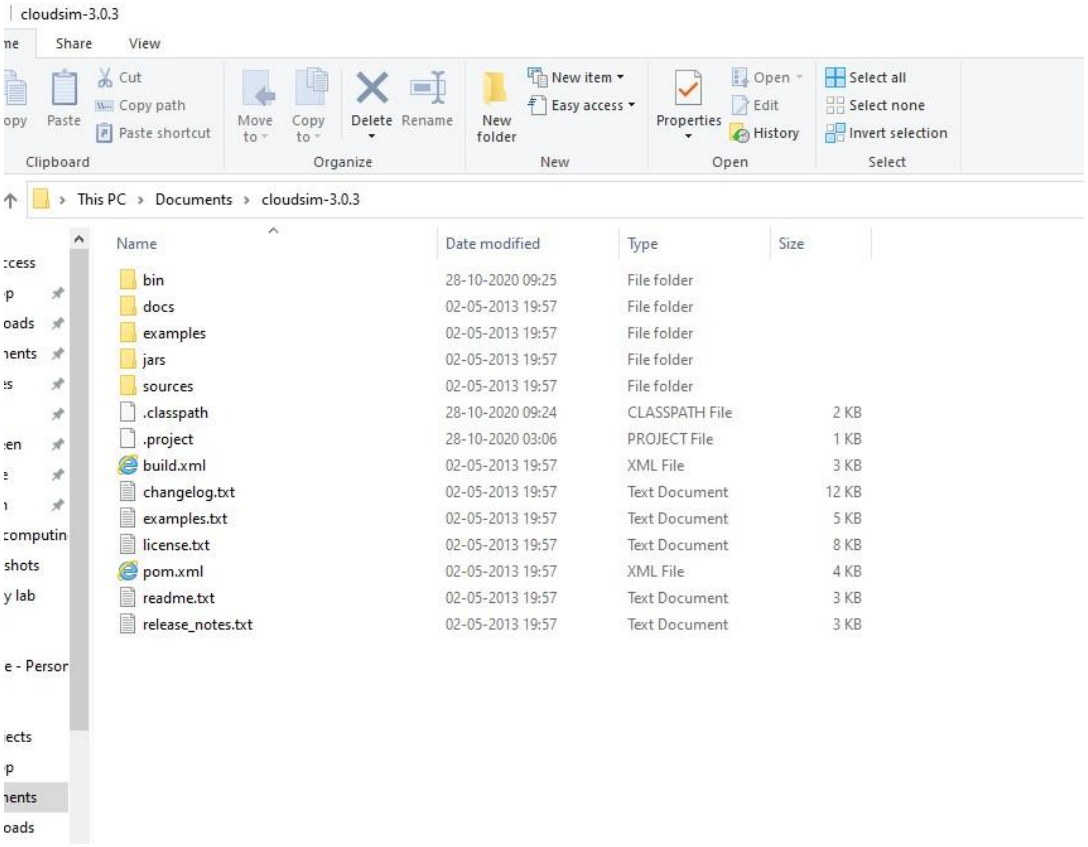
EX.No: 6 **Name:** Nandhini A
Date: 27/10/20 **Reg.No:** 312217205054

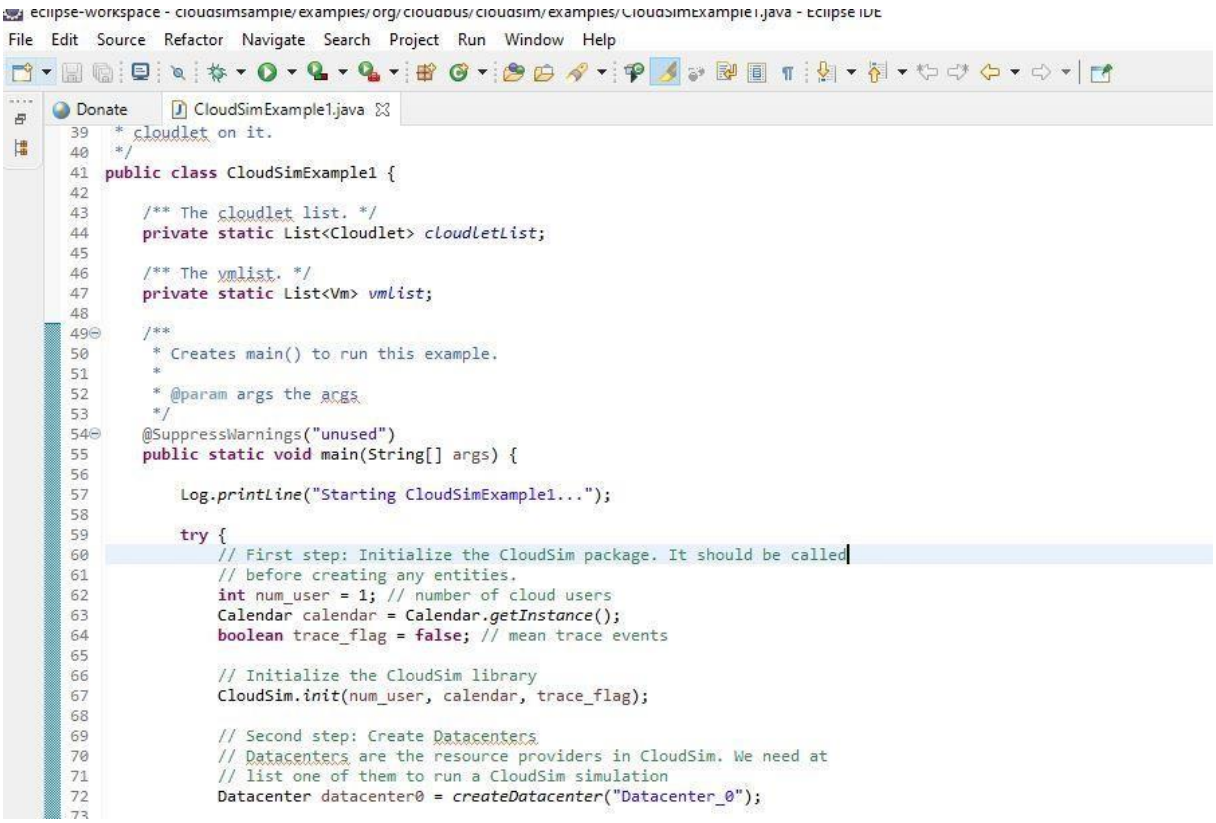
Cloud Sim Installation

CLOUDSIM AND ECLIPSE INSTALLATION:

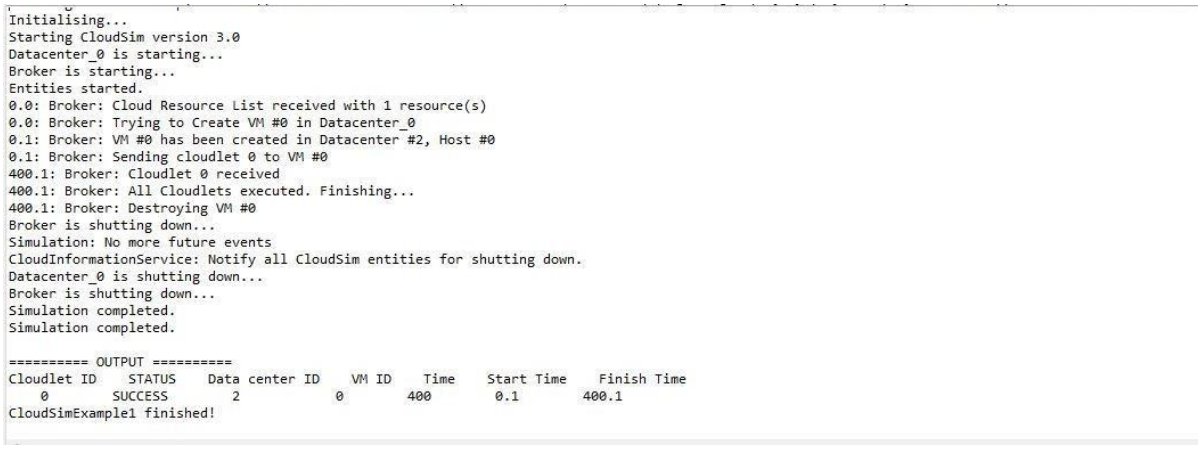



cloudsim-3.0.3
Share
View
Cut
Copy path
Paste shortcut
Paste
Clipboard
Move to
Copy to
Delete
Rename
Organize
New item
Easy access
New folder
New
Properties
Open
Edit
History
Open
Select all
Select none
Invert selection
Select
This PC › Documents › cloudsim-3.0.3
Name
Date modified
Type
Size
bin 28-10-2020 09:25 File folder
docs 02-05-2013 19:57 File folder
examples 02-05-2013 19:57 File folder
jars 02-05-2013 19:57 File folder
sources 02-05-2013 19:57 File folder
.classpath 28-10-2020 09:24 CLASSPATH File 2 KB
.project 28-10-2020 03:06 PROJECT File 1 KB
build.xml 02-05-2013 19:57 XML File 3 KB
changelog.txt 02-05-2013 19:57 Text Document 12 KB
examples.txt 02-05-2013 19:57 Text Document 5 KB
license.txt 02-05-2013 19:57 Text Document 8 KB
pom.xml 02-05-2013 19:57 XML File 4 KB
readme.txt 02-05-2013 19:57 Text Document 3 KB
release_notes.txt 02-05-2013 19:57 Text Document 3 KB

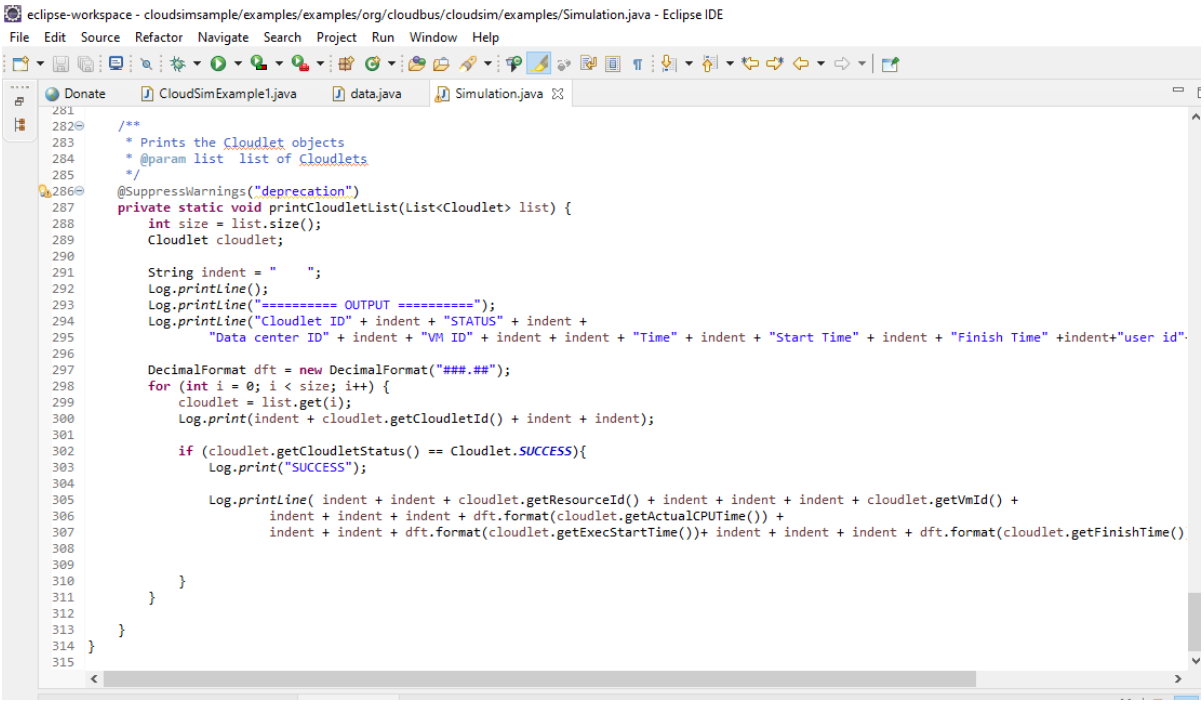
SAMPLE CLOUD SCENARIO:



OUTPUT:



SCHEDULING ALGORITHM:(SJF)




```
    /**
     * Prints the Cloudlet objects
     * @param list  list of Cloudlets
     */
    @SuppressWarnings("deprecation")
    private static void printCloudletList(List<Cloudlet> list) {
        int size = list.size();
        Cloudlet cloudlet;

        String indent = "    ";
        Log.printLine();
        Log.printLine("========== OUTPUT ==========");
        Log.printLine("Cloudlet ID" + indent + "STATUS" + indent +
                "Data center ID" + indent + "VM ID" + indent + indent + "Time" + indent + "Start Time" + indent + "Finish Time" +indent+"user id"

        DecimalFormat dft = new DecimalFormat("###.##");
        for (int i = 0; i < size; i++) {
            cloudlet = list.get(i);
            Log.print(indent + cloudlet.getCloudletId() + indent + indent);

            if (cloudlet.getCloudletStatus() == Cloudlet.SUCCESS){
                Log.print("SUCCESS");

                Log.printLine( indent + indent + cloudlet.getResourceId() + indent + indent + indent + cloudlet.getVmId() +
                        indent + indent + indent + dft.format(cloudlet.getActualCPUTime()) +
                        indent + indent + dft.format(cloudlet.getExecStartTime())+ indent + indent + indent + dft.format(cloudlet.getFinishTime()


            }
        }

    }
}
```

```
Starting CloudSimExample6...
Initialising...
Starting CloudSim version 3.0
Datacenter_0 is starting...
Datacenter_1 is starting...
Broker is starting...
Entities started.
0.0: Broker: Cloud Resource List received with 2 resource(s)
0.0: Broker: Trying to Create VM #0 in Datacenter_0
0.0: Broker: Trying to Create VM #1 in Datacenter_0
0.0: Broker: Trying to Create VM #2 in Datacenter_0
0.0: Broker: Trying to Create VM #3 in Datacenter_0
0.0: Broker: Trying to Create VM #4 in Datacenter_0
0.0: Broker: Trying to Create VM #5 in Datacenter_0
0.0: Broker: Trying to Create VM #6 in Datacenter_0
0.0: Broker: Trying to Create VM #7 in Datacenter_0
0.0: Broker: Trying to Create VM #8 in Datacenter_0
0.0: Broker: Trying to Create VM #9 in Datacenter_0
[VmScheduler.vmCreate] Allocation of VM #6 to Host #0 failed by RAM
[VmScheduler.vmCreate] Allocation of VM #6 to Host #1 failed by MIPS
[VmScheduler.vmCreate] Allocation of VM #7 to Host #0 failed by RAM
[VmScheduler.vmCreate] Allocation of VM #7 to Host #1 failed by MIPS
[VmScheduler.vmCreate] Allocation of VM #8 to Host #0 failed by RAM
[VmScheduler.vmCreate] Allocation of VM #8 to Host #1 failed by MIPS
[VmScheduler.vmCreate] Allocation of VM #9 to Host #0 failed by RAM
[VmScheduler.vmCreate] Allocation of VM #9 to Host #1 failed by MIPS
0.1: Broker: VM #0 has been created in Datacenter #2, Host #0
0.1: Broker: VM #1 has been created in Datacenter #2, Host #0
0.1: Broker: VM #2 has been created in Datacenter #2, Host #0
0.1: Broker: VM #3 has been created in Datacenter #2, Host #1
0.1: Broker: VM #4 has been created in Datacenter #2, Host #0
0.1: Broker: VM #5 has been created in Datacenter #2, Host #1
0.1: Broker: Creation of VM #6 failed in Datacenter #2
```

```
0.2: Broker: Sending cloudlet 2 to VM #2
0.2: Broker: Sending cloudlet 3 to VM #3
0.2: Broker: Sending cloudlet 4 to VM #4
0.2: Broker: Sending cloudlet 5 to VM #5
0.2: Broker: Sending cloudlet 6 to VM #6
0.2: Broker: Sending cloudlet 7 to VM #7
0.2: Broker: Sending cloudlet 8 to VM #8
0.2: Broker: Sending cloudlet 9 to VM #9
0.2: Broker: Sending cloudlet 10 to VM #0
0.2: Broker: Sending cloudlet 11 to VM #1
0.2: Broker: Sending cloudlet 12 to VM #2
0.2: Broker: Sending cloudlet 13 to VM #3
0.2: Broker: Sending cloudlet 14 to VM #4
0.2: Broker: Sending cloudlet 15 to VM #5
0.2: Broker: Sending cloudlet 16 to VM #6
0.2: Broker: Sending cloudlet 17 to VM #7
0.2: Broker: Sending cloudlet 18 to VM #8
0.2: Broker: Sending cloudlet 19 to VM #9
0.2: Broker: Sending cloudlet 20 to VM #0
0.2: Broker: Sending cloudlet 21 to VM #1
0.2: Broker: Sending cloudlet 22 to VM #2
0.2: Broker: Sending cloudlet 23 to VM #3
0.2: Broker: Sending cloudlet 24 to VM #4
0.2: Broker: Sending cloudlet 25 to VM #5
0.2: Broker: Sending cloudlet 26 to VM #6
0.2: Broker: Sending cloudlet 27 to VM #7
0.2: Broker: Sending cloudlet 28 to VM #8
0.2: Broker: Sending cloudlet 29 to VM #9
0.2: Broker: Sending cloudlet 30 to VM #0
0.2: Broker: Sending cloudlet 31 to VM #1
0.2: Broker: Sending cloudlet 32 to VM #2
0.2: Broker: Sending cloudlet 33 to VM #3
0.2: Broker: Sending cloudlet 34 to VM #4
```

```
1.3539999999999999: Broker: Cloudlet 7 received
1.377: Broker: Cloudlet 5 received
1.6349999999999998: Broker: Cloudlet 6 received
1.781: Broker: Cloudlet 2 received
2.299: Broker: Cloudlet 1 received
2.471: Broker: Cloudlet 13 received
2.532: Broker: Cloudlet 8 received
2.826: Broker: Cloudlet 9 received
2.831: Broker: Cloudlet 4 received
2.941: Broker: Cloudlet 12 received
3.0509999999999997: Broker: Cloudlet 0 received
3.0509999999999997: Broker: Cloudlet 15 received
3.459: Broker: Cloudlet 17 received
4.514: Broker: Cloudlet 16 received
4.55: Broker: Cloudlet 23 received
4.752: Broker: Cloudlet 10 received
4.861999999999999: Broker: Cloudlet 14 received
5.081999999999999: Broker: Cloudlet 11 received
5.352: Broker: Cloudlet 19 received
5.479999999999999: Broker: Cloudlet 22 received
5.4830000000000005: Broker: Cloudlet 18 received
5.8809999999999985: Broker: Cloudlet 25 received
5.976000000000001: Broker: Cloudlet 27 received
6.353999999999998: Broker: Cloudlet 24 received
7.042999999999998: Broker: Cloudlet 35 received
7.105: Broker: Cloudlet 28 received
7.3679999999999986: Broker: Cloudlet 33 received
7.477999999999998: Broker: Cloudlet 20 received
7.477999999999998: Broker: Cloudlet 21 received
7.481000000000001: Broker: Cloudlet 26 received
7.964999999999998: Broker: Cloudlet 32 received
7.973000000000001: Broker: Cloudlet 29 received
8.074999999999998: Broker: Cloudlet 34 received
```

```
========== OUTPUT ==========
Cloudlet ID    STATUS    Data center ID    VM ID        Time    Start Time    Finish Time    user id
    3        SUCCESS        2            3            1.07        0.2            1.27    4
    7        SUCCESS        3            7            1.15        0.2            1.35    4
    5        SUCCESS        2            5            1.18        0.2            1.38    4
    6        SUCCESS        3            6            1.43        0.2            1.63    4
    2        SUCCESS        2            2            1.58        0.2            1.78    4
    1        SUCCESS        2            1            2.1        0.2            2.3    4
    13        SUCCESS        2            3            1.2        1.27            2.47    4
    8        SUCCESS        3            8            2.33        0.2            2.53    4
    9        SUCCESS        3            9            2.63        0.2            2.83    4
    4        SUCCESS        2            4            2.63        0.2            2.83    4
    12        SUCCESS        2            2            1.16        1.78            2.94    4
    0        SUCCESS        2            0            2.85        0.2            3.05    4
    15        SUCCESS        2            5            1.67        1.38            3.05    4
    17        SUCCESS        3            7            2.11        1.35            3.46    4
    16        SUCCESS        3            6            2.88        1.63            4.51    4
    23        SUCCESS        2            3            2.08        2.47            4.55    4
    10        SUCCESS        2            0            1.7        3.05            4.75    4
    14        SUCCESS        2            4            2.03        2.83            4.86    4
    11        SUCCESS        2            1            2.78        2.3            5.08    4
    19        SUCCESS        3            9            2.53        2.83            5.35    4
    22        SUCCESS        2            2            2.54        2.94            5.48    4
    18        SUCCESS        3            8            2.95        2.53            5.48    4
    25        SUCCESS        2            5            2.83        3.05            5.88    4
    27        SUCCESS        3            7            2.52        3.46            5.98    4
    24        SUCCESS        2            4            1.49        4.86            6.35    4
    35        SUCCESS        2            5            1.16        5.88            7.04    4
    28        SUCCESS        3            8            1.62        5.48            7.11    4
    33        SUCCESS        2            3            2.82        4.55            7.37    4
    20        SUCCESS        2            0            2.73        4.75            7.48    4
    21        SUCCESS        2            1            2.4        5.08            7.48    4
    26        SUCCESS        3            6            2.97        4.51            7.48    4
```