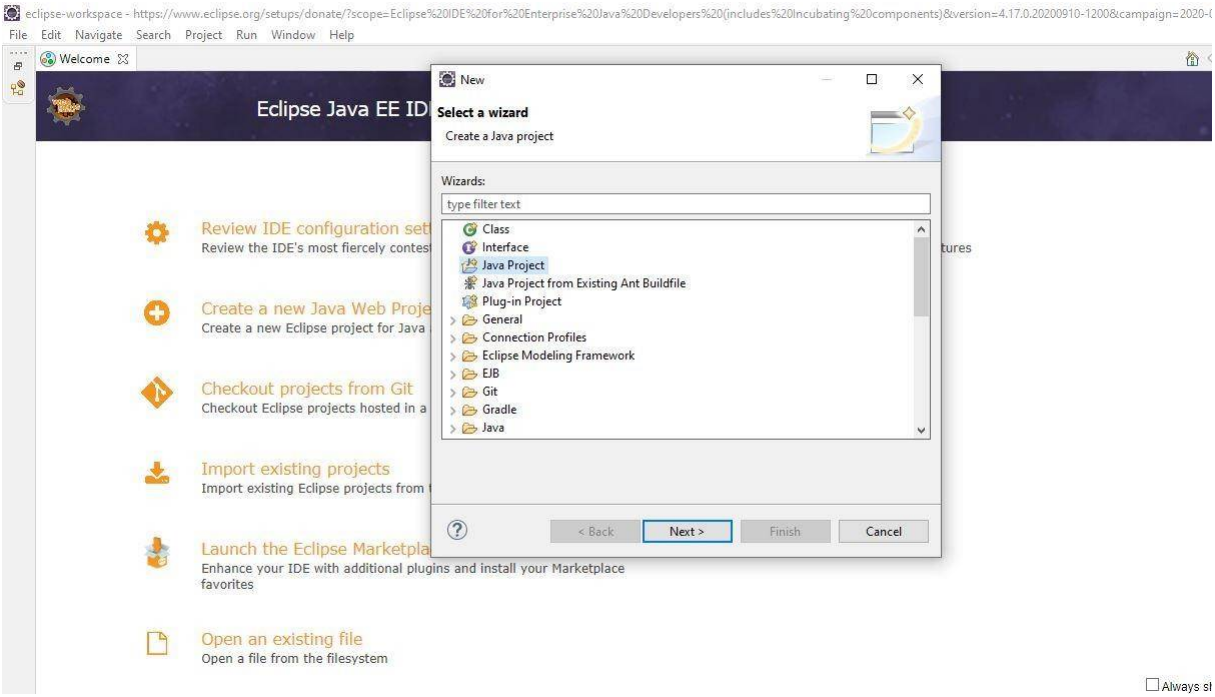
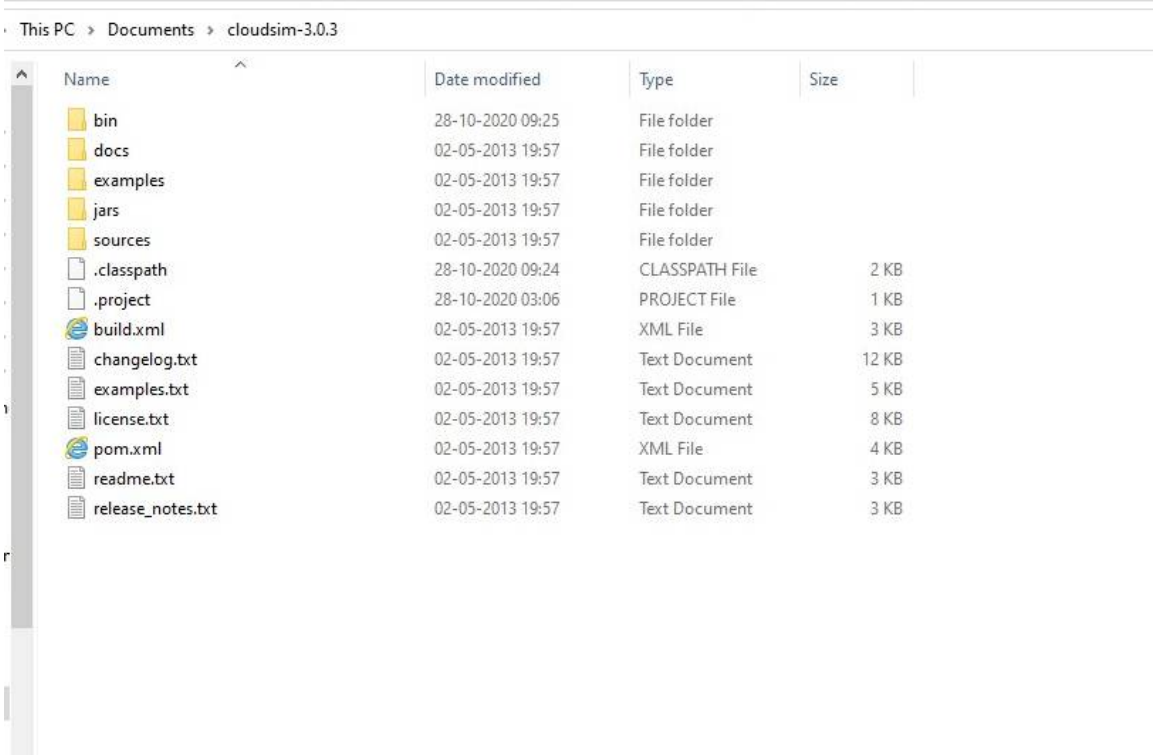
312217205060
NIVETHA M K

EX.NO:6
DATE:27-10-2020 **CLOUD SIM INSTALLATION**

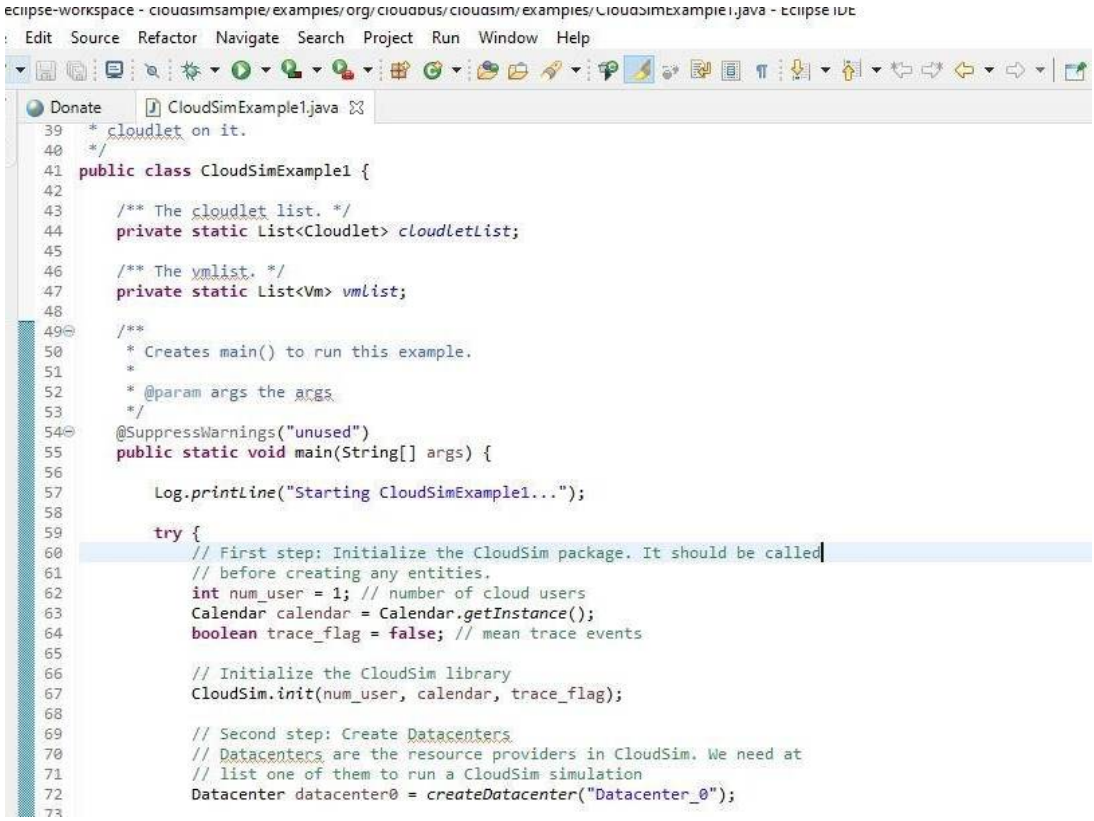
CLOUD SIM AND ECLIPSE INSTALLATION:





312217205060
NIVETHA M K

SAMPLE CLOUD SCENARIO:



OUTPUT:

```
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!
```

312217205060
NIVETHA M K

SCHEDULING ALGORITHM:(SJF)

eclipse-workspace - cloudsimsample/examples/examples/org/cloudbus/cloudsim/examples/Simulation.java - Eclipse IDE

Edit Source Refactor Navigate Search Project Run Window Help

Donate | CloudSimExample1.java | data.java | Simulation.java

```
281
282     /**
283      * Prints the Cloudlet objects
284      * @param list  list of Cloudlets
285      */
286     @SuppressWarnings("deprecation")
287     private static void printCloudletList(List<Cloudlet> list) {
288         int size = list.size();
289         Cloudlet cloudlet;
290
291         String indent = "    ";
292         Log.printLine();
293         Log.printLine("========== OUTPUT ==========");
294         Log.printLine("Cloudlet ID" + indent + "STATUS" + indent +
295                 "Data center ID" + indent + "VM ID" + indent + indent + "Time" + indent + "Start Time" + indent + "Finish Time" +indent+"user id"
296
297         DecimalFormat dft = new DecimalFormat("###.##");
298         for (int i = 0; i < size; i++) {
299             cloudlet = list.get(i);
300             Log.print(indent + cloudlet.getCloudletId() + indent + indent);
301
302             if (cloudlet.getCloudletStatus() == Cloudlet.SUCCESS){
303                 Log.print("SUCCESS");
304
305                 Log.printLine( indent + indent + cloudlet.getResourceId() + indent + indent + indent + cloudlet.getVmId() +
306                         indent + indent + indent + dft.format(cloudlet.getActualCPUTime()) +
307                         indent + indent + dft.format(cloudlet.getExecStartTime())+ indent + indent + indent + dft.format(cloudlet.getFinishTime()
308
309
310             }
311         }
312
313     }
314 }
```

312217205060
NIVETHA M K

```
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
```

312217205060
NIVETHA M K

```
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
```

312217205060
NIVETHA M K

```
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
```

312217205060
NIVETHA M K

```
========== 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
```