

# KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY (KIIT)

Deemed to be University U/S 3 of UGC Act, 1956

# CC LAB ASSIG

Name : HITU RAJ

Roll no. :2005025

• Branch : CSE-10

Results of the Simulation Completed at: 07/02/2023 02:35:57

# 1.ROUND ROBIN

**Overall Response Time Summary** 

|                              | Avg (ms) | Min (ms) | Max (ms) |
|------------------------------|----------|----------|----------|
| Overall response time:       | 318.80   | 40.83    | 609.02   |
| Data Center processing time: | 1.24     | 0.02     | 2.57     |

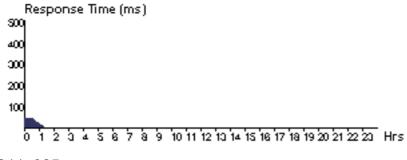
# Response Time by Region

| Userbase | Avg (ms) | Min (ms) | Max (ms) |
|----------|----------|----------|----------|
| UB10_025 | 50.72    | 41.96    | 57.51    |
| UB11_025 | 505.01   | 410.14   | 581.52   |
| UB12_025 | 507.35   | 410.24   | 582.78   |
| UB13_025 | 498.23   | 395.12   | 577.76   |
| UB14_025 | 503.20   | 431.52   | 594.02   |
| UB15_025 | 501.11   | 382.72   | 564.02   |
| UB16_025 | 494.74   | 409.02   | 558.82   |
| UB17_025 | 509.60   | 431.29   | 582.67   |
| UB18_025 | 497.92   | 398.82   | 581.52   |
| UB19_025 | 498.74   | 397.87   | 592.78   |
| UB1_025  | 50.93    | 43.51    | 63.76    |
| UB20_025 | 507.14   | 439.00   | 591.49   |
| UB21_025 | 497.39   | 409.02   | 609.02   |
| UB22_025 | 498.93   | 422.72   | 593.78   |
| UB23_025 | 497.91   | 416.52   | 570.16   |
| UB24_025 | 494.48   | 396.47   | 580.43   |
| UB25_025 | 503.07   | 392.66   | 575.11   |
| UB26_025 | 497.70   | 434.02   | 596.52   |
| UB27_025 | 502.03   | 427.58   | 599.02   |
| UB28_025 | 496.96   | 406.43   | 585.08   |
| UB29_025 | 504.80   | 424.02   | 577.64   |
| UB2_025  | 50.32    | 40.83    | 60.86    |
| UB30_025 | 502.64   | 408.97   | 571.37   |
| UB31_025 | 198.16   | 166.35   | 229.52   |
| UB32_025 | 203.28   | 166.52   | 238.54   |
| UB33_025 | 200.67   | 167.43   | 240.10   |

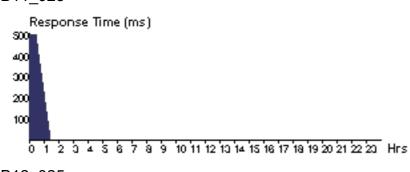
|          |        | 1      | 1      |
|----------|--------|--------|--------|
| UB34_025 | 201.54 | 175.47 | 234.52 |
| UB35_025 | 200.92 | 164.17 | 238.20 |
| UB36_025 | 202.40 | 168.19 | 234.04 |
| UB37_025 | 201.29 | 165.10 | 232.52 |
| UB38_025 | 201.16 | 154.46 | 236.52 |
| UB39_025 | 200.29 | 169.40 | 230.11 |
| UB3_025  | 297.68 | 253.38 | 346.62 |
| UB40_025 | 203.14 | 167.52 | 254.38 |
| UB4_025  | 51.24  | 44.27  | 59.81  |
| UB5_025  | 50.99  | 43.79  | 61.76  |
| UB6_025  | 51.49  | 43.01  | 59.59  |
| UB7_025  | 51.49  | 41.59  | 62.46  |
| UB8_025  | 51.04  | 42.26  | 59.14  |
| UB9_025  | 50.42  | 42.76  | 58.77  |

# User Base Hourly Response Times

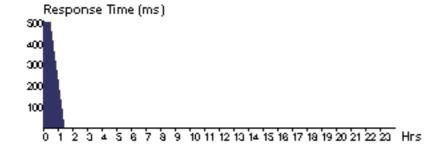


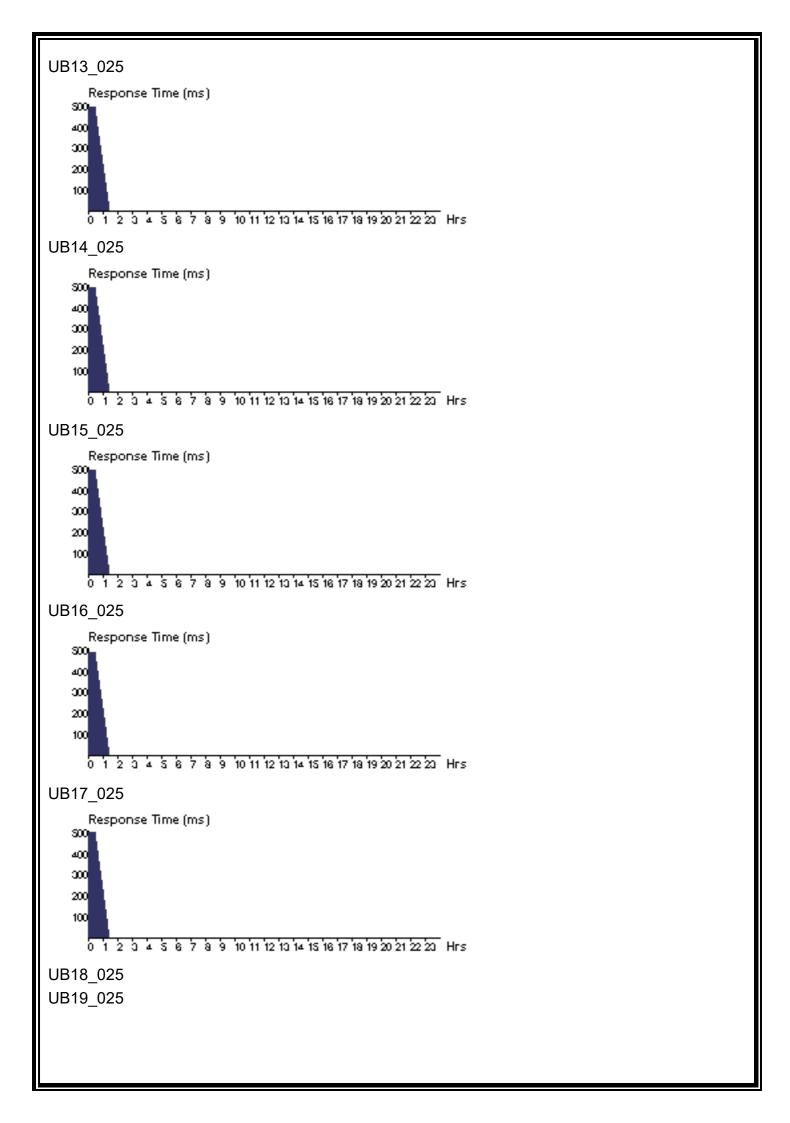


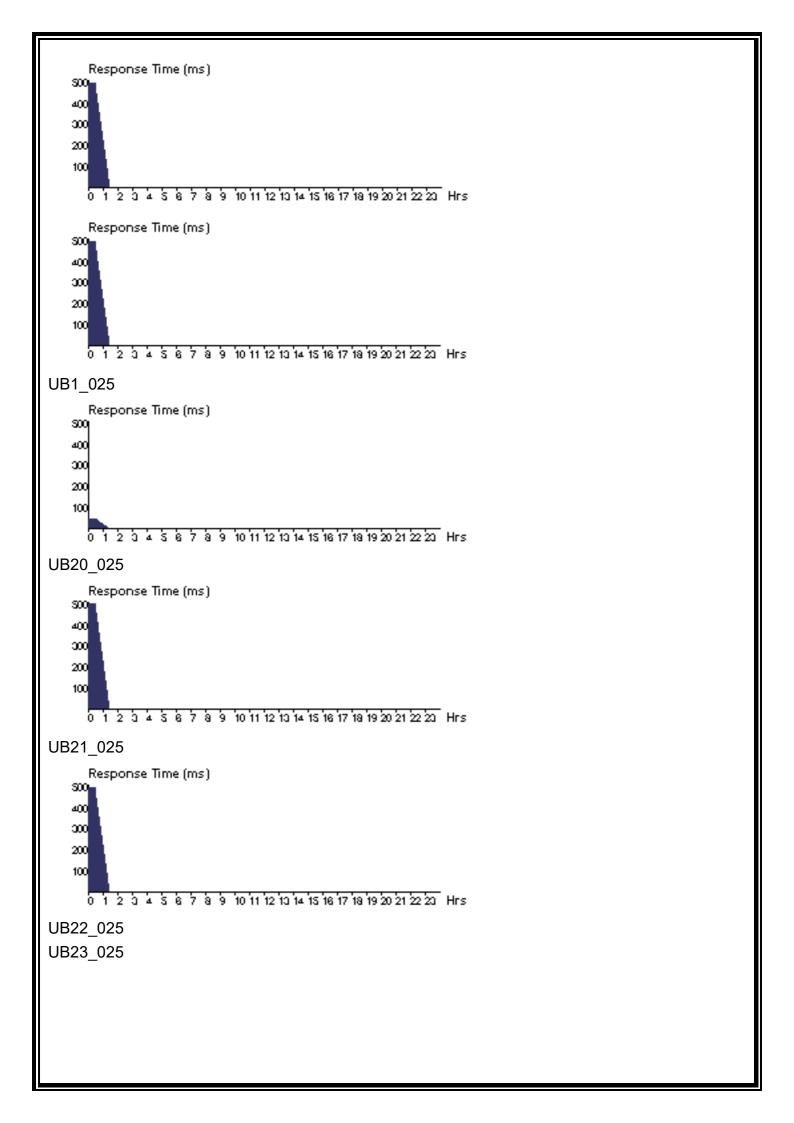
#### UB11\_025

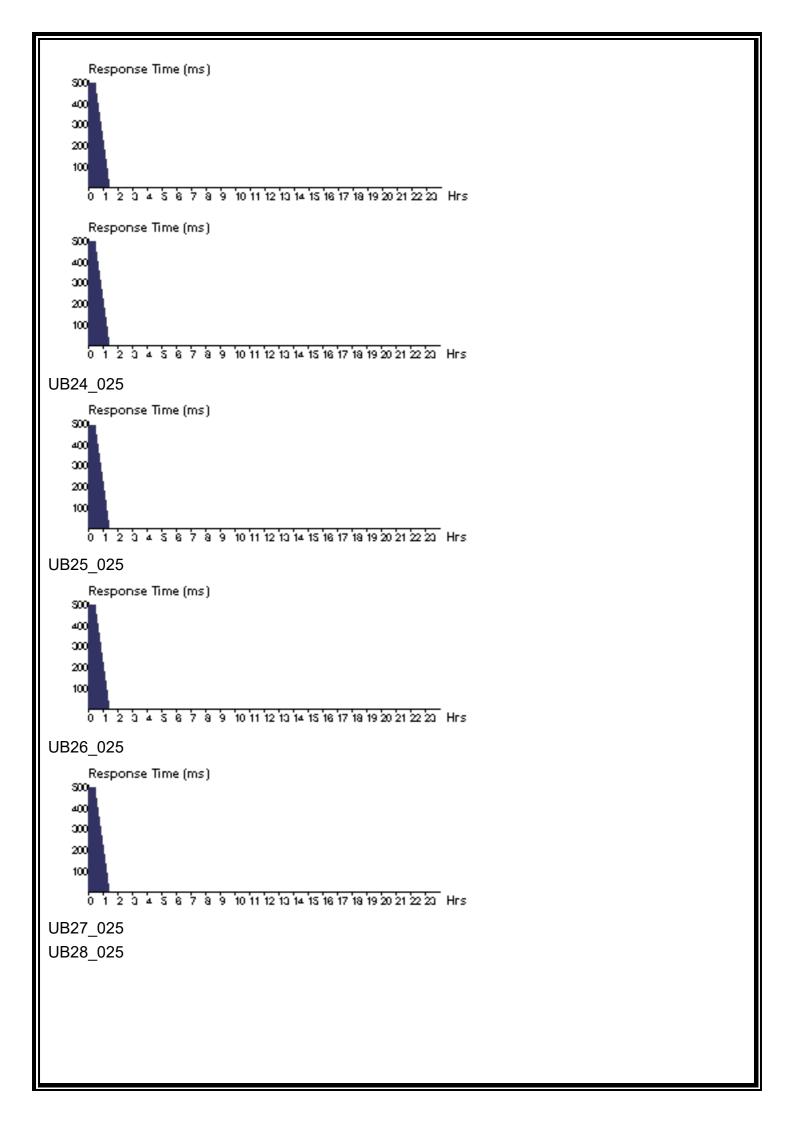


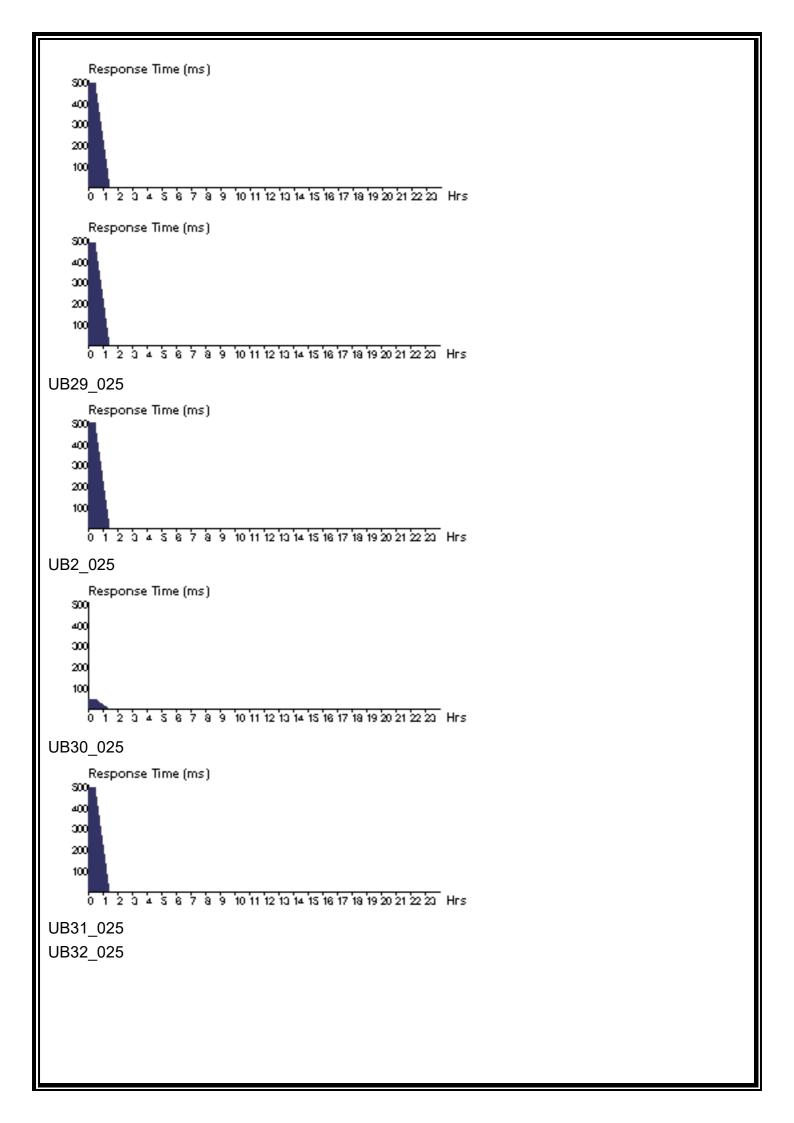
# UB12\_025

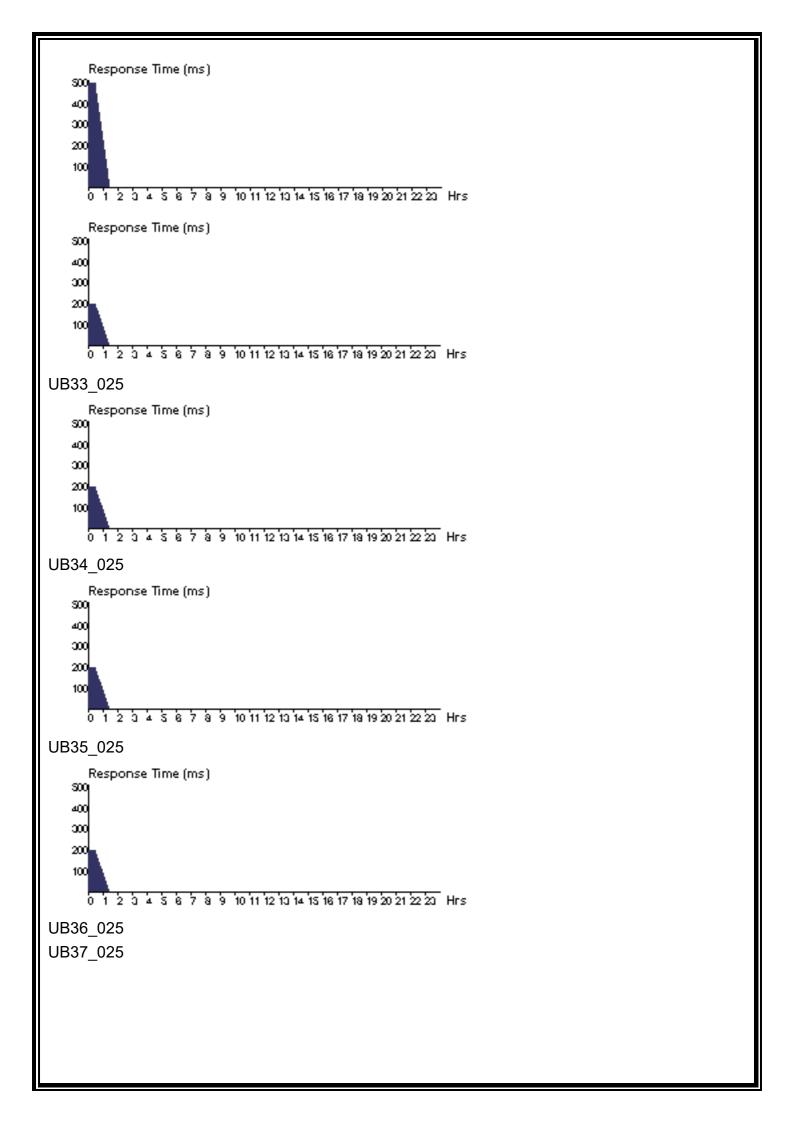


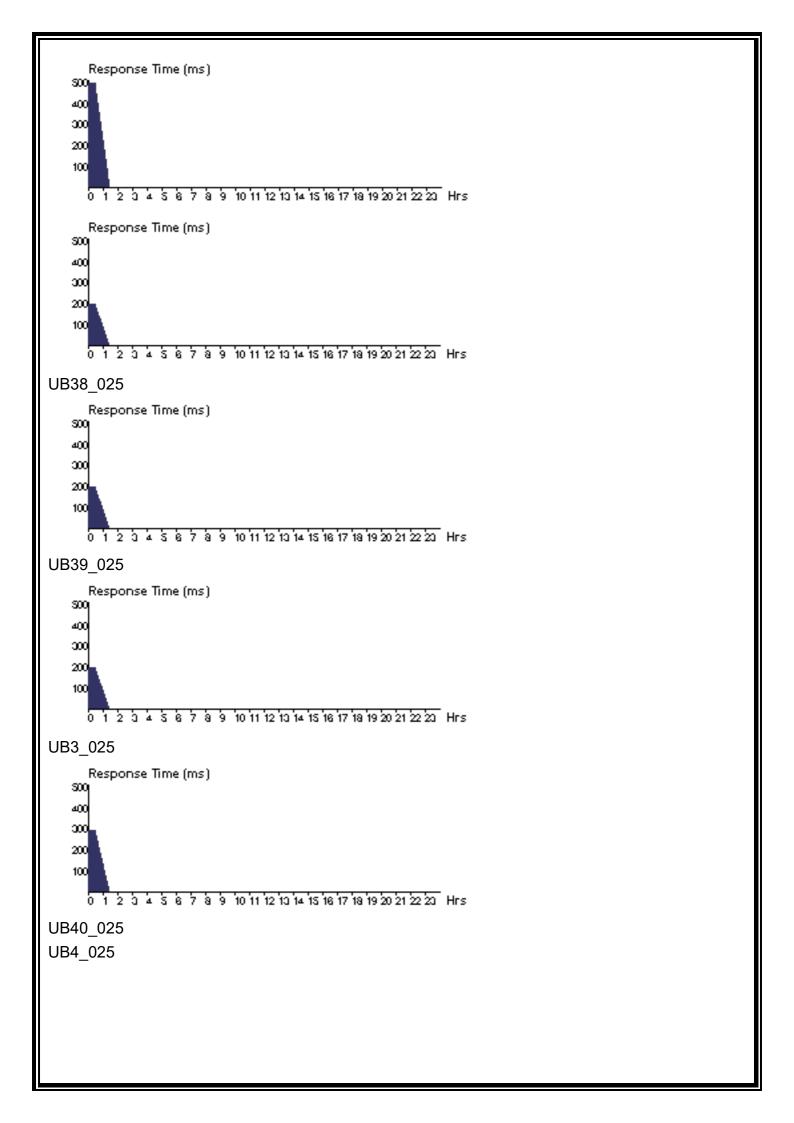


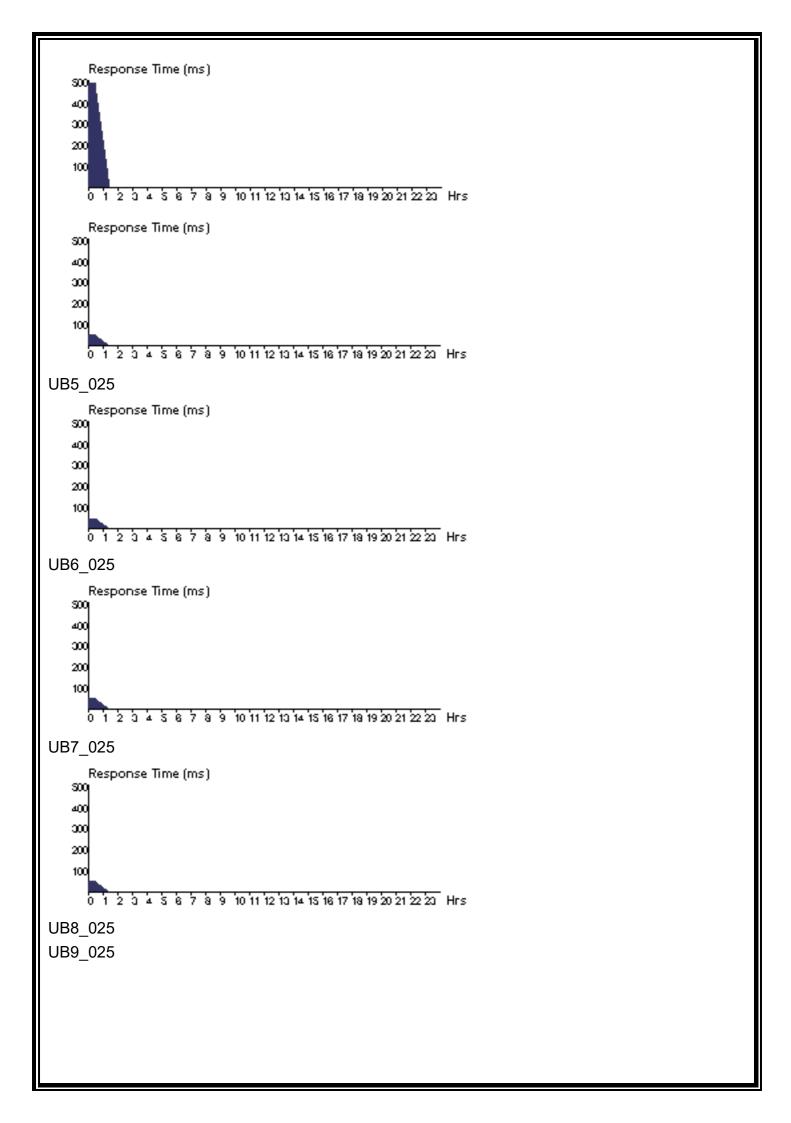


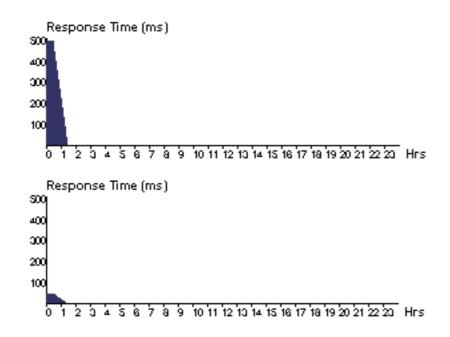












# **Data Center Request Servicing Times**

| Data Center | Avg (ms) | Min (ms) | Max (ms) |
|-------------|----------|----------|----------|
| DC1_025     | 1.24     | 0.02     | 2.57     |

#### Data Center Hourly Average Processing Times

#### DC1\_025

#### **Data Center Hourly Loading**

#### DC1\_025

Req's per Hr 200,000 100,000 0 1 2 3 4 S 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Hrs



Total Virtual Machine Cost (\$): 0.50

Total Data Transfer Cost (\$): 2.35

Grand Total: (\$) 2.85

| Data Center | VM Cost \$ | Data Transfer<br>Cost \$ | Total \$ |
|-------------|------------|--------------------------|----------|
| DC1_025     | 0.50       | 2.35                     | 2.85     |

# 2. EQUALLY SPREAD CURRENT EXECUTION LOAD

# Overall Response Time Summary

|                              | Avg (ms) | Min (ms) | Max (ms) |
|------------------------------|----------|----------|----------|
| Overall response time:       | 318.72   | 41.59    | 609.02   |
| Data Center processing time: | 1.24     | 0.02     | 2.29     |

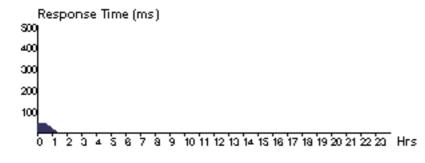
# Response Time by Region

| Userbase | Avg (ms) | Min (ms) | Max (ms) |
|----------|----------|----------|----------|
| UB10_025 | 50.70    | 41.96    | 57.51    |
| UB11_025 | 504.79   | 410.14   | 581.52   |
| UB12_025 | 505.23   | 396.47   | 587.84   |
| UB13_025 | 498.00   | 395.12   | 577.76   |
| UB14_025 | 501.44   | 431.52   | 594.02   |
| UB15_025 | 500.48   | 382.72   | 564.02   |
| UB16_025 | 495.30   | 409.02   | 558.82   |
| UB17_025 | 506.43   | 431.29   | 582.67   |
| UB18_025 | 498.52   | 398.82   | 581.52   |
| UB19_025 | 499.42   | 397.87   | 592.78   |
| UB1_025  | 50.93    | 43.51    | 63.76    |
| UB20_025 | 506.36   | 439.00   | 591.49   |
| UB21_025 | 498.22   | 409.02   | 609.02   |
| UB22_025 | 499.45   | 422.72   | 593.78   |
| UB23_025 | 496.08   | 416.52   | 570.16   |
| UB24_025 | 495.42   | 405.19   | 580.43   |
| UB25_025 | 503.93   | 392.66   | 575.11   |
| UB26_025 | 499.18   | 434.02   | 596.52   |
| UB27_025 | 500.95   | 422.58   | 599.02   |
| UB28_025 | 497.56   | 406.43   | 585.08   |
| UB29_025 | 504.69   | 432.59   | 577.64   |
| UB2_025  | 50.44    | 42.33    | 60.86    |
| UB30_025 | 504.71   | 416.52   | 574.00   |
| UB31_025 | 199.13   | 166.35   | 238.53   |
| UB32_025 | 203.43   | 166.52   | 238.54   |
| UB33_025 | 200.58   | 167.43   | 240.10   |

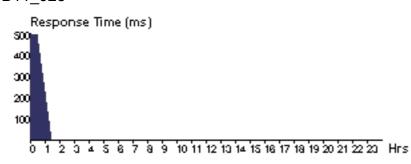
| UB34_025 | 201.28 | 175.47 | 235.46 |
|----------|--------|--------|--------|
| UB35_025 | 199.41 | 164.17 | 233.52 |
| UB36_025 | 202.19 | 168.19 | 234.04 |
| UB37_025 | 200.24 | 165.10 | 232.52 |
| UB38_025 | 201.87 | 154.46 | 236.52 |
| UB39_025 | 200.88 | 169.40 | 230.11 |
| UB3_025  | 297.31 | 253.38 | 346.62 |
| UB40_025 | 203.93 | 167.52 | 254.38 |
| UB4_025  | 51.15  | 44.27  | 59.81  |
| UB5_025  | 50.97  | 43.26  | 61.76  |
| UB6_025  | 51.70  | 43.30  | 59.59  |
| UB7_025  | 51.61  | 41.59  | 62.46  |
| UB8_025  | 50.99  | 42.26  | 59.14  |
| UB9_025  | 50.47  | 43.07  | 58.77  |

# User Base Hourly Response Times

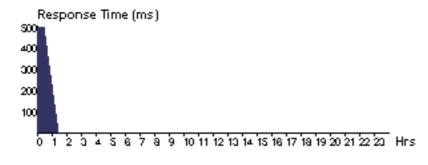
# UB10\_025



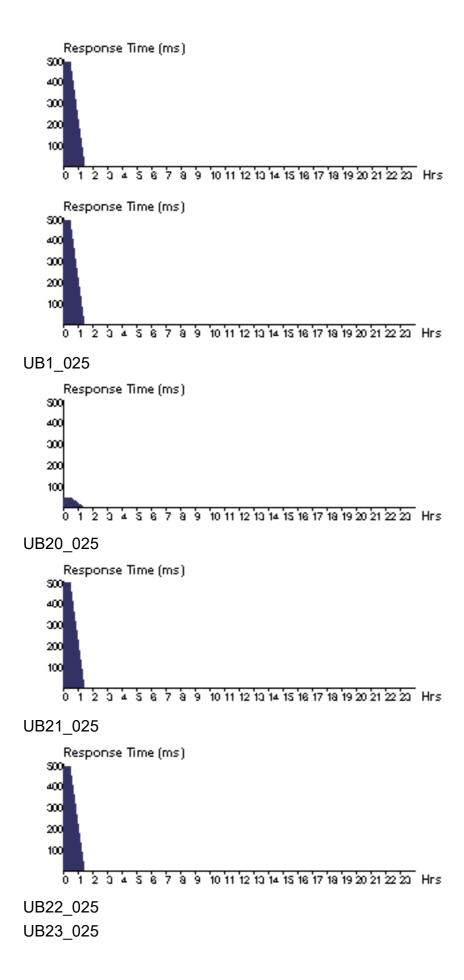
#### UB11\_025

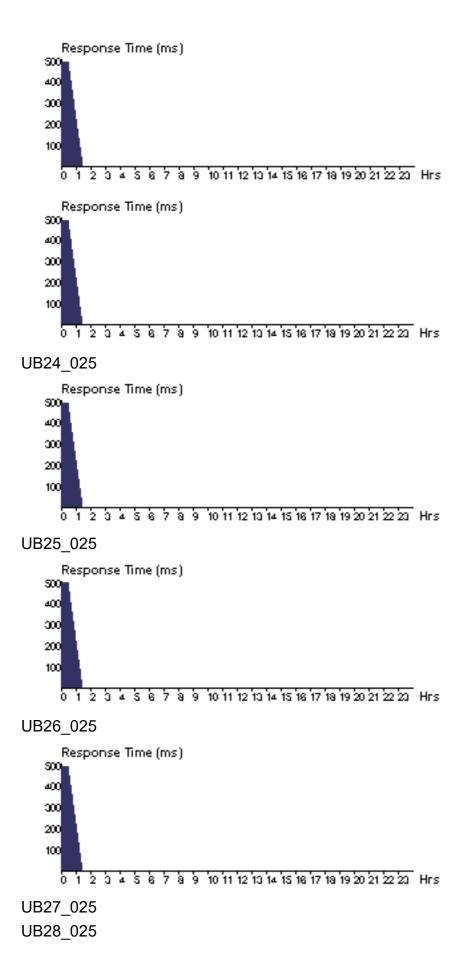


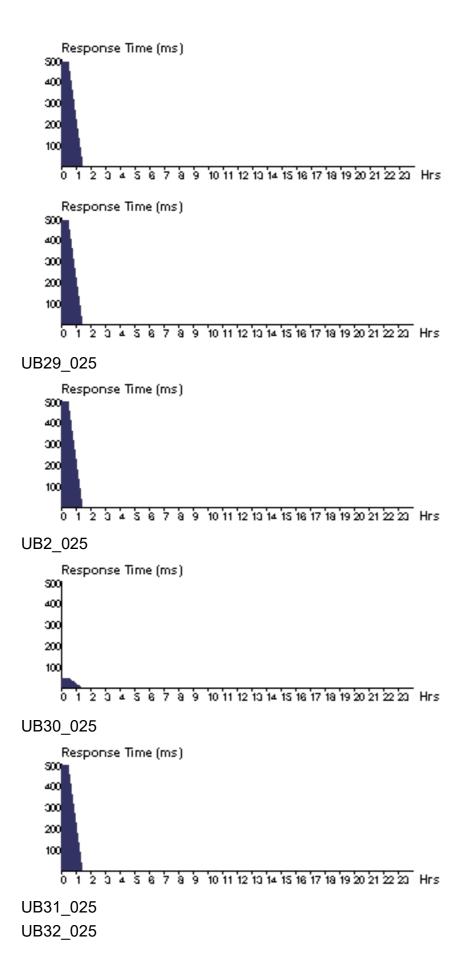
# UB12\_025

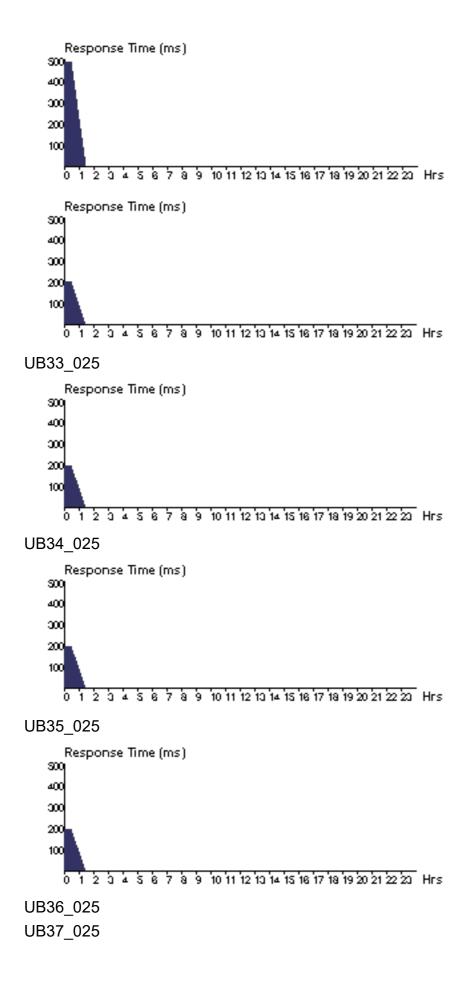


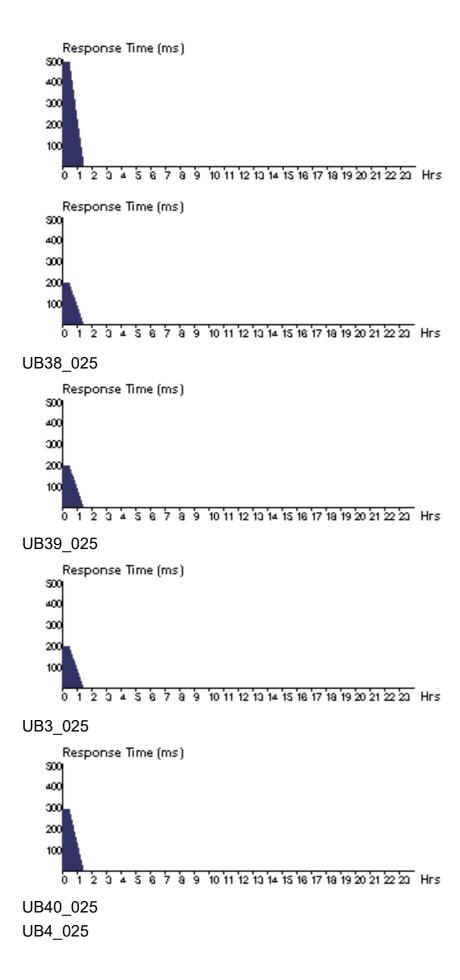
```
UB13_025
      Response Time (ms)
    500
    400
    300
    200
    100
      0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Hrs
UB14_025
      Response Time (ms)
    300
    400
    300
    200
    100
        1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Hrs
UB15_025
      Response Time (ms)
    300
    400
    300
    200
    100
        1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Hrs
UB16_025
      Response Time (ms)
    300
    400
    300
    200
    100
      0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Hrs
UB17_025
      Response Time (ms)
    300
    400
    300
    200
    100
           2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Hrs
UB18 025
UB19_025
```

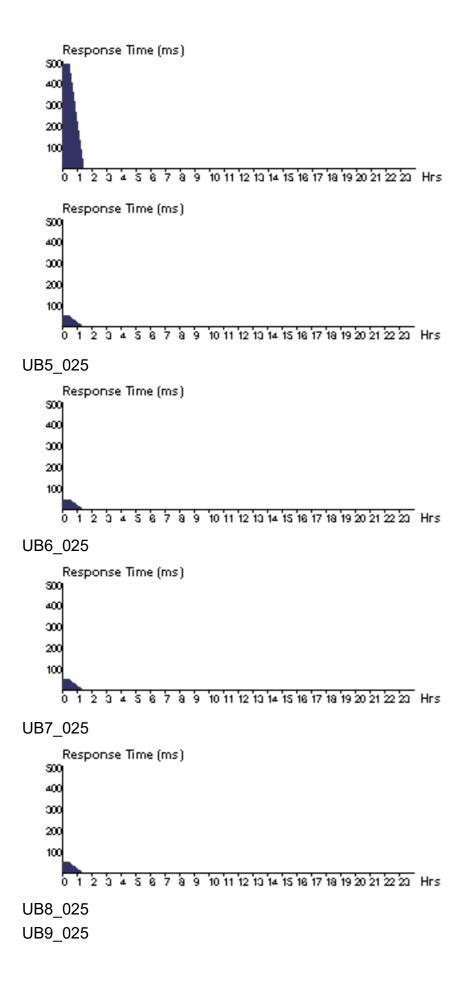


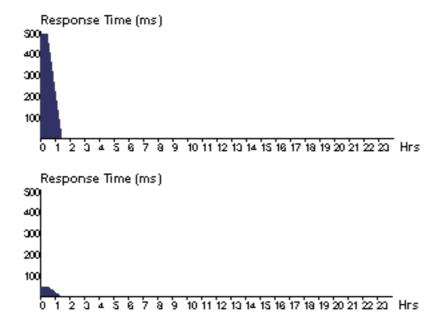








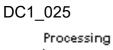


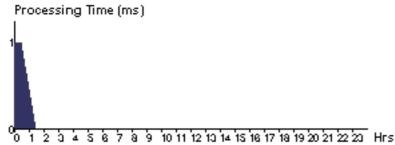


# **Data Center Request Servicing Times**

| Data Center | Avg (ms) | Min (ms) | Max (ms) |
|-------------|----------|----------|----------|
| DC1_025     | 1.24     | 0.02     | 2.29     |

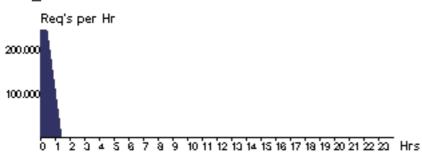
#### Data Center Hourly Average Processing Times





#### **Data Center Hourly Loading**







Total Virtual Machine Cost (\$): 0.50

Total Data Transfer Cost (\$): 2.35

Grand Total: (\$) 2.85

| Data Center | VM Cost \$ | Data Transfer<br>Cost \$ | Total \$ |
|-------------|------------|--------------------------|----------|
| DC1_025     | 0.50       | 2.35                     | 2.85     |

# Results of the Simulation Completed at: 07/02/2023 02:35:15

# 3. THROTTLE

# Overall Response Time Summary

Avg (ms) Min (ms) Max (ms)

Overall response time: 318.85 41.59 609.02

Data Center processing time: 1.24 0.02 2.27

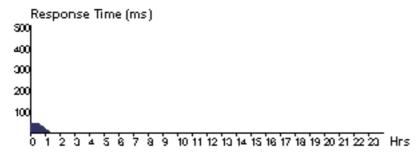
# Response Time by Region

| Userbase | Avg (ms) | Min (ms) | Max (ms) |
|----------|----------|----------|----------|
| UB10_025 | 50.66    | 41.96    | 57.51    |
| UB11_025 | 503.37   | 410.14   | 581.52   |
| UB12_025 | 503.38   | 396.47   | 587.84   |
| UB13_025 | 499.74   | 415.41   | 577.76   |
| UB14_025 | 503.77   | 405.20   | 594.02   |
| UB15_025 | 500.26   | 382.72   | 564.02   |
| UB16_025 | 493.96   | 396.54   | 558.82   |
| UB17_025 | 505.89   | 431.29   | 582.67   |
| UB18_025 | 497.60   | 398.82   | 581.52   |
| UB19_025 | 497.37   | 397.87   | 592.78   |
| UB1_025  | 51.08    | 43.51    | 63.76    |
| UB20_025 | 508.70   | 439.00   | 591.49   |
| UB21_025 | 499.57   | 409.02   | 609.02   |
| UB22_025 | 501.31   | 422.72   | 593.78   |
| UB23_025 | 498.71   | 416.52   | 570.16   |
| UB24_025 | 494.56   | 422.62   | 580.43   |
| UB25_025 | 503.87   | 392.66   | 575.11   |
| UB26_025 | 495.66   | 433.97   | 596.52   |
| UB27_025 | 502.54   | 427.58   | 599.02   |
| UB28_025 | 499.76   | 406.43   | 584.00   |
| UB29_025 | 505.54   | 432.59   | 577.64   |
| UB2_025  | 50.45    | 42.33    | 60.86    |
| UB30_025 | 505.68   | 416.52   | 586.54   |
| UB31_025 | 198.76   | 166.35   | 244.46   |
| UB32_025 | 202.87   | 166.52   | 236.54   |
| UB33 025 | 200.58   | 167.43   | 240.10   |

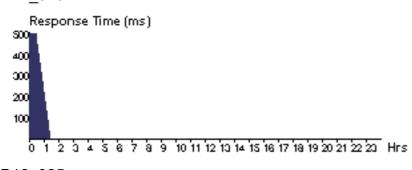
| UB34_025 | 201.42 | 175.47 | 235.46 |
|----------|--------|--------|--------|
| UB35_025 | 200.66 | 164.17 | 233.52 |
| UB36_025 | 201.72 | 168.19 | 234.04 |
| UB37_025 | 200.81 | 165.10 | 232.52 |
| UB38_025 | 201.87 | 154.46 | 236.52 |
| UB39_025 | 200.57 | 169.40 | 230.11 |
| UB3_025  | 298.26 | 253.38 | 346.62 |
| UB40_025 | 203.30 | 167.52 | 254.38 |
| UB4_025  | 51.16  | 44.55  | 59.01  |
| UB5_025  | 50.86  | 43.26  | 61.76  |
| UB6_025  | 51.46  | 43.30  | 59.59  |
| UB7_025  | 51.49  | 41.59  | 62.46  |
| UB8_025  | 50.90  | 42.26  | 59.14  |
| UB9_025  | 50.38  | 42.76  | 58.77  |

# User Base Hourly Response Times

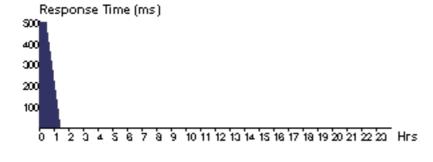


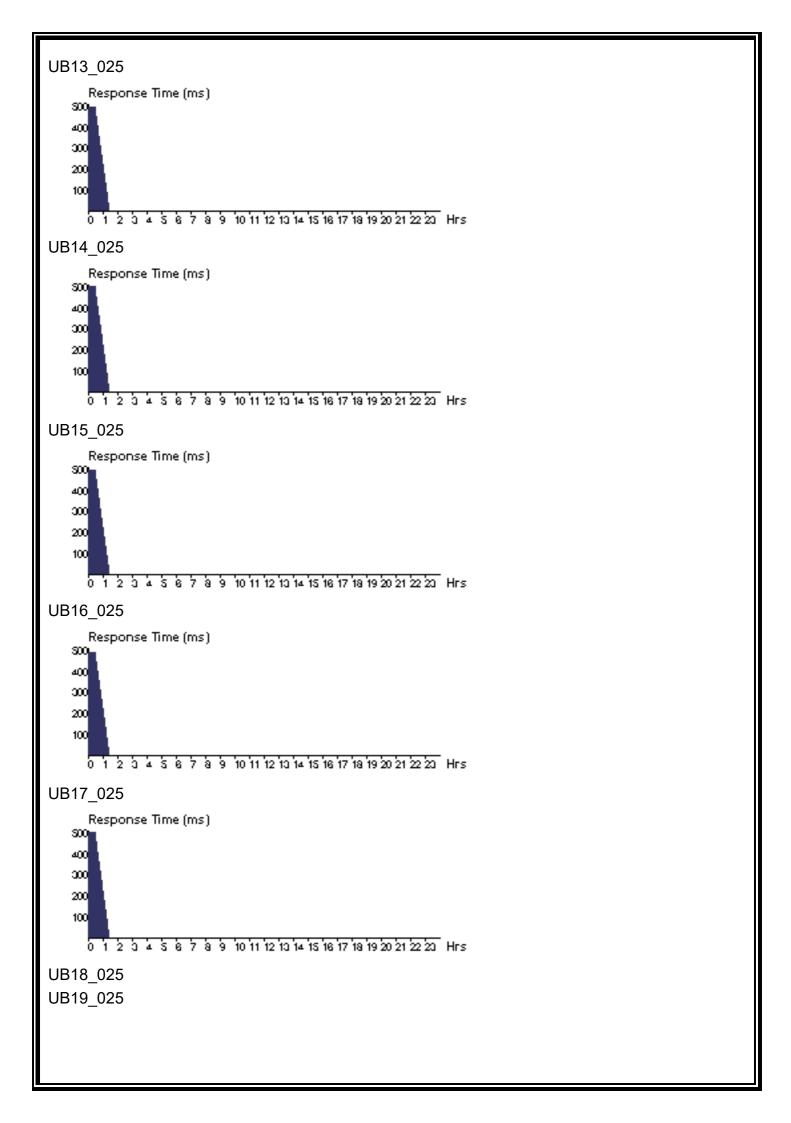


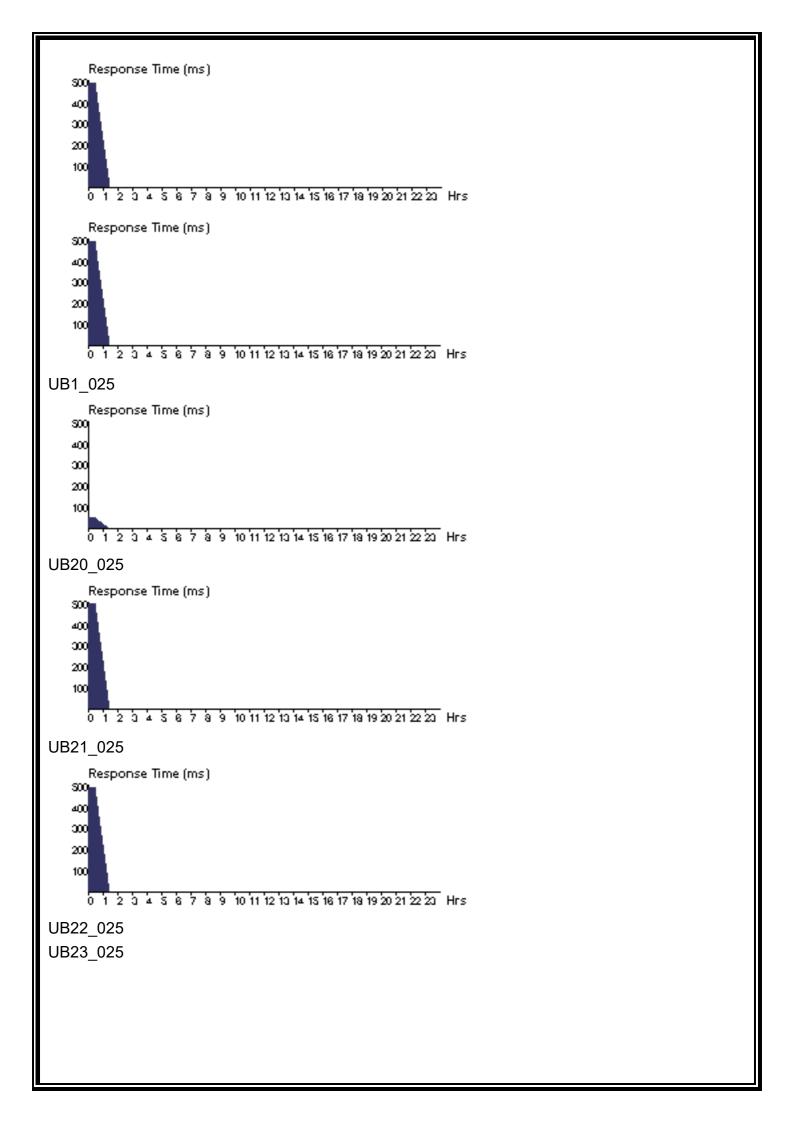
#### UB11\_025

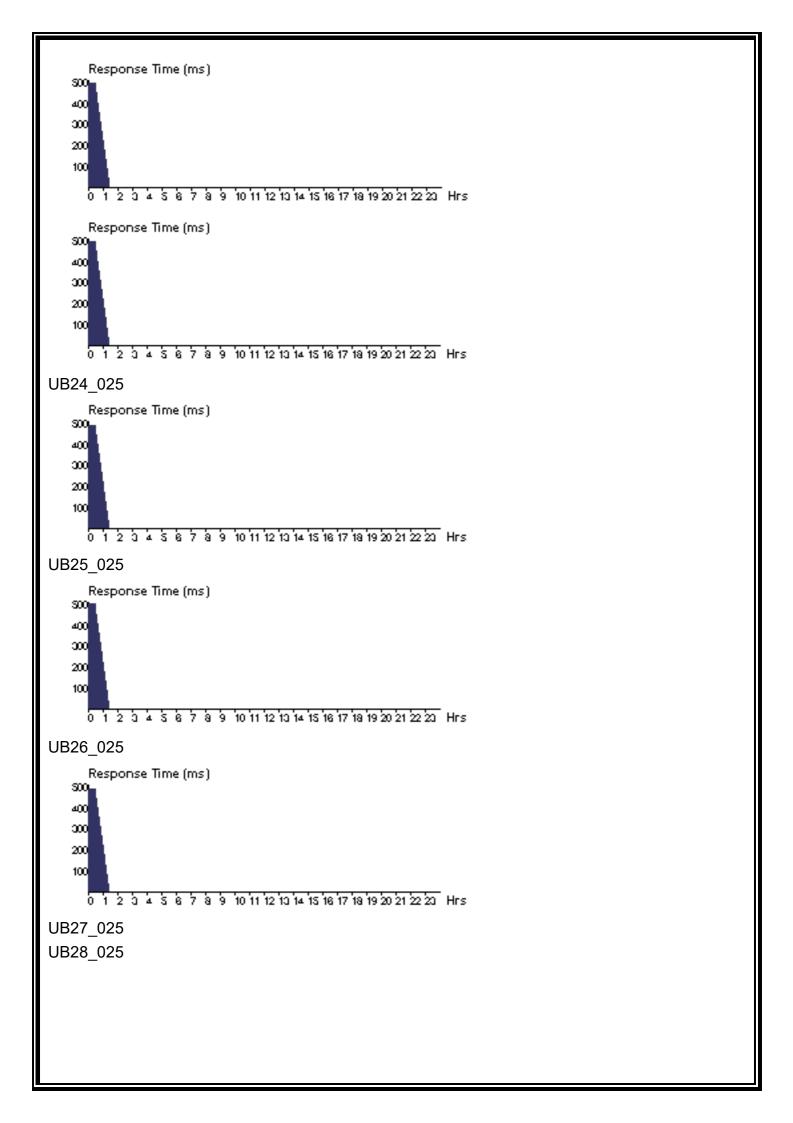


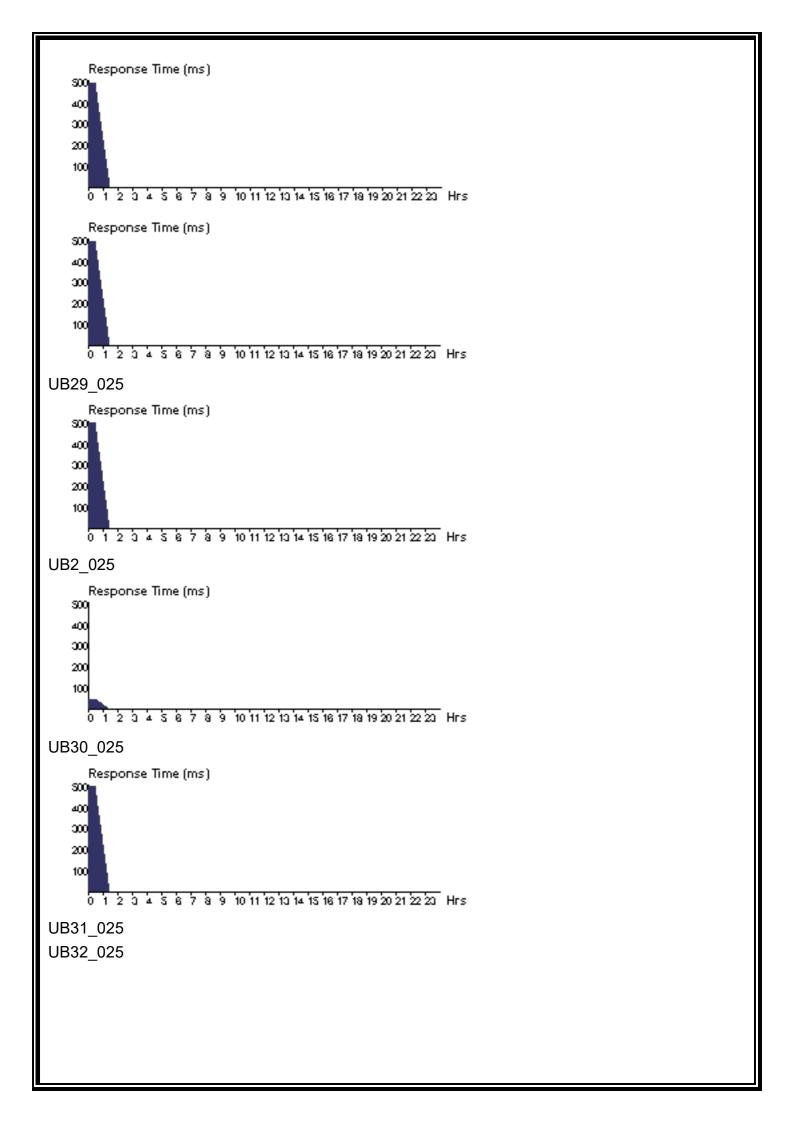
# UB12\_025

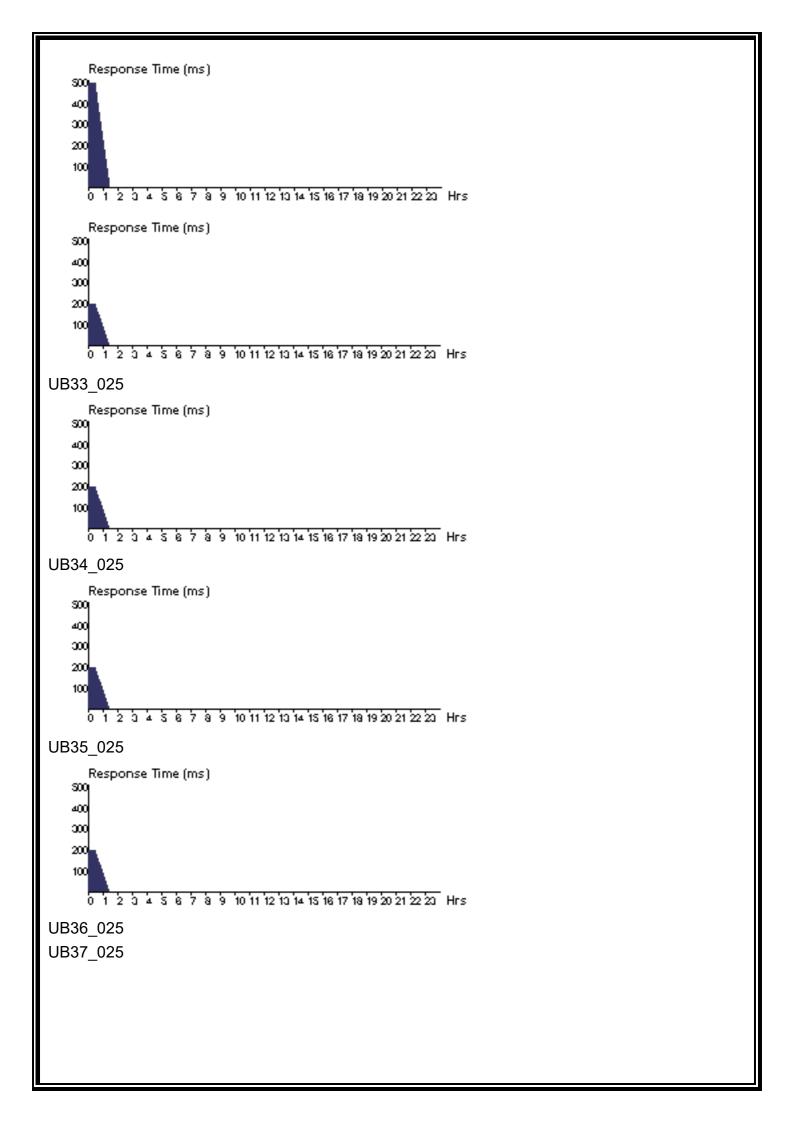


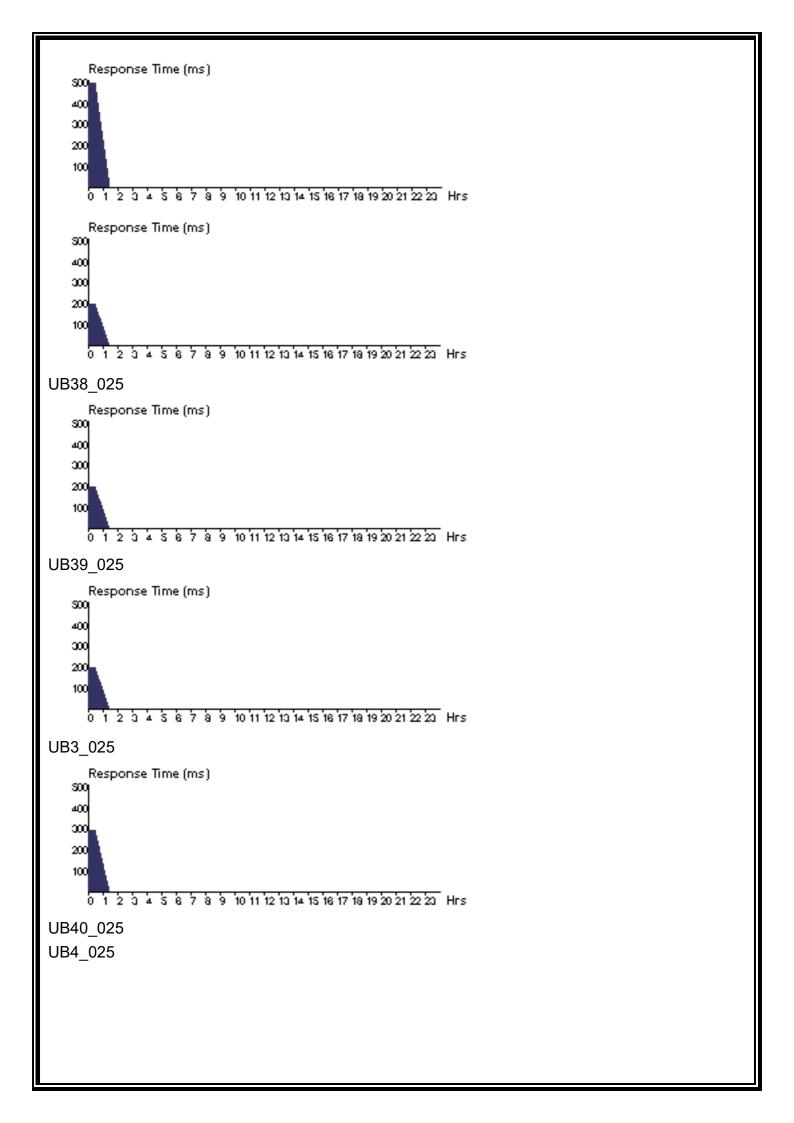


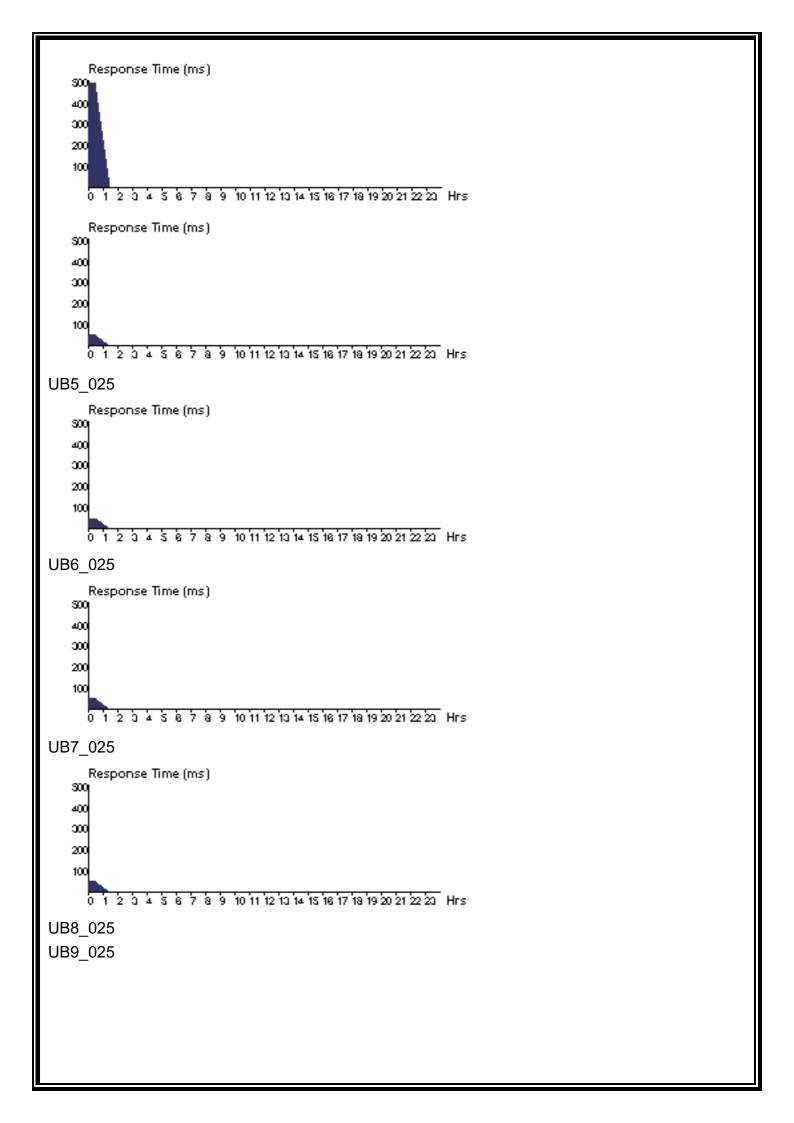


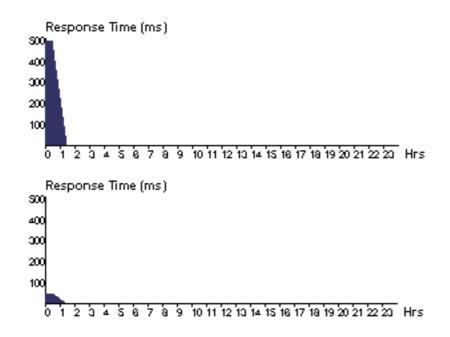










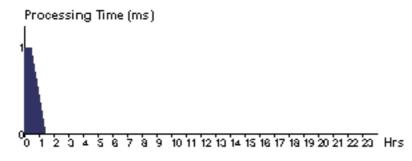


# **Data** Center Request Servicing Times

| Data Center | Avg (ms) | Min (ms) | Max (ms) |
|-------------|----------|----------|----------|
| DC1_025     | 1.24     | 0.02     | 2.27     |

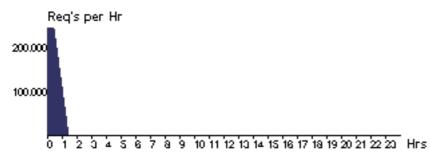
#### **Data Center Hourly Average Processing Times**

#### DC1\_025



#### **Data Center Hourly Loading**







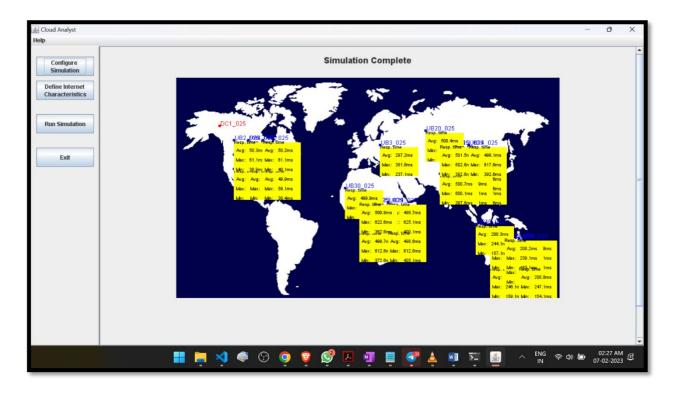
Total Virtual Machine Cost (\$): 0.50

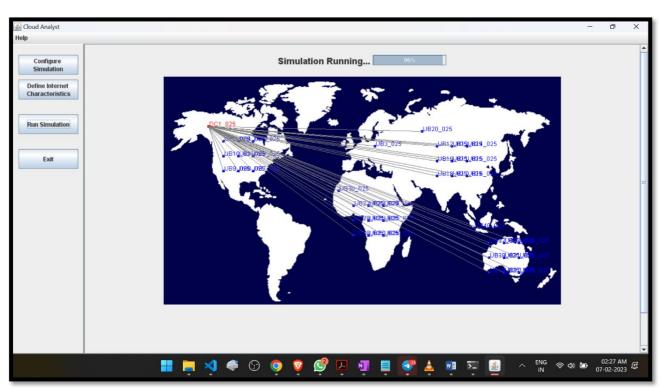
Total Data Transfer Cost (\$): 2.35

Grand Total: (\$) 2.85

| Data Center | VM Cost \$ | Data Transfer<br>Cost \$ | Total \$ |
|-------------|------------|--------------------------|----------|
| DC1_025     | 0.50       | 2.35                     | 2.85     |

# **STIMULATION**

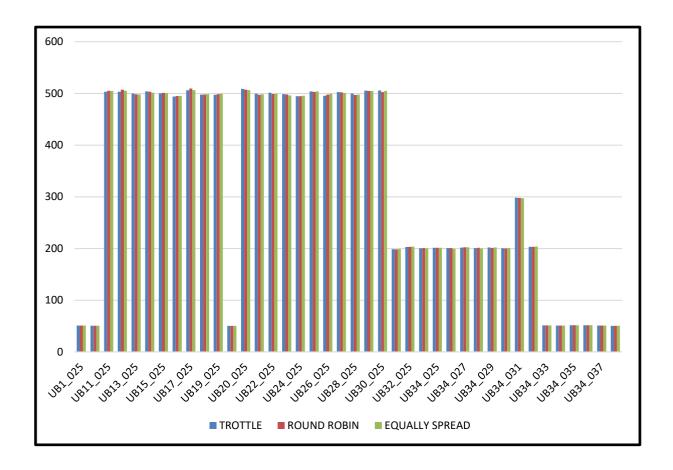




# COMPARISION TABLE

| USER                 | TROTTLE | ROUND ROBIN    | EQUALLY SPREAD  |
|----------------------|---------|----------------|-----------------|
| UB1_025              | 51.08   | 50.93          | 50.93           |
| UB10 025             | 50.66   | 50.72          | 50.7            |
| UB11_025             | 503.37  | 505.01         | 504.79          |
| UB12 025             | 503.38  | 507.35         | 505.23          |
| UB13_025             | 499.74  | 498.23         | 498             |
| UB14 025             | 503.77  | 503.2          | 501.44          |
| UB15 025             | 500.26  | 501.11         | 500.48          |
| UB16 025             | 493.96  | 494.74         | 495.3           |
| UB17_025             | 505.89  | 509.6          | 506.43          |
| UB18 025             |         |                |                 |
| CD10_023             | 497.6   | 497.92         | 498.52          |
| UB19 025             | 407.27  | 400.74         | 400.42          |
| UB2 025              | 497.37  | 498.74         | 499.42<br>50.44 |
| UB20 025             | 50.45   | 50.32          |                 |
| OB20_023             | 508.7   | 507.14         | 506.36          |
| UB21_025             | 499.57  | 497.39         | 498.22          |
| UB22_025             | 501.31  | 498.93         | 499.45          |
| UB23_025             | 498.71  | 497.91         | 496.08          |
| UB24_025             | 494.56  | 494.48         | 495.42          |
| UB25_025             | 503.87  | 503.07         | 503.93          |
| UB26_025             | 495.66  | 497.7          | 499.18          |
| UB27_025             | 502.54  | 502.03         | 500.95          |
| UB28_025             | 499.76  | 496.96         | 497.56          |
| UB29_025             | 505.54  | 504.8          | 504.69          |
| UB30_025             | 505.68  | 502.64         | 504.71          |
| UB31_025             | 198.76  | 198.16         | 199.13          |
| UB32_025             | 202.87  | 203.28         | 203.43          |
| UB33_025             | 200.58  | 200.67         | 200.58          |
| UB34_025             | 201.42  | 201.54         | 201.28          |
| UB34 026             | 200.66  | 200.92         | 199.41          |
| UB34 027             | 201.72  | 202.4          | 202.19          |
| UB34 028             | 200.81  | 201.29         | 200.24          |
| UB34_029             | 201.87  | 201.16         | 201.87          |
| UB34_030             | 200.57  | 200.29         | 200.88          |
| UB34_031             | 298.26  | 297.68         | 297.31          |
| UB34_032             | 203.3   | 203.14         | 203.93          |
| UB34_033             | 51.16   | 51.24          | 51.15           |
| UB34_034             | 50.86   | 50.99          | 50.97           |
| UB34_035             | 51.46   | 51.49          | 51.7            |
| UB34 036<br>UB34 037 | 51.49   | 51.49<br>51.04 | 51.61<br>50.99  |
| UB34 037             | 50.38   | 50.42          | 50.47           |
| OD37_030             | 50.50   | JU.72          | JU.1/           |

# **GRAPH**



# **SUBMITETED BY:**

HITU RAJ

**2005025** 

**CS-10**