**Lab Activity No. 2**

Basic Classful IP Addressing

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| *Yr./Sec*. *: II- CINS* | *Course: BSIT* | *Grade :* |
| *Grp. No.: 7* | *Grp. Leader*: *RECTO, JANELLE* | *Date Started: SEPT. 17, 2024* |

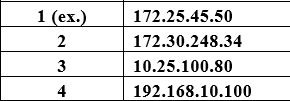
*Members: BABASA, FRANCESCA LOURAINE, BOZAR, MERYNEL LE, LAGAHIT, CHARLENE Date submitted : SEPT. 17, 2024*

*LIM, HANS JOMEL, DOCTOLERO, MARC ESTEPHEN Professor: PERCIVAL ADAO*

# OBJECTIVES:

* 1. Convert basic classful IP Address
  2. Identify IP address classes
  3. Identify IP address network mask, type and its binary equivalent

# MATERIALS:



* 1. Lecture handout
  2. Lab Act. No.2 template

# PROCEDURES:

* 1. In Table A, identify its IP Classes, network mask and binary equivalent of the given IP address.
  2. In Table B, identify its decimal IP equivalent, IP Classes, IP Address Type and Network Mask.
  3. Use your handout and past IP address lesson as your reference
  4. Complete table A and table B
  5. After completing the activity, save it as PDF and submit it in your TBL

1. **Using the given IP address, Identify its IP Classes, Network mask and binary equivalent of the given IP address.**

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|  | **IP ADDRESS**  **DECIMAL EQUIVALENT** | **CLASSFUL IP CLASSES** | **IP ADDRESS TYPE** | **NETWORK MASK** | **IP BINARY EQUIVALENT** |
| **1(ex)** | **172.25.45.50** | **Class B** | **Private** | **255.255.0.0** | **10101100.00011001.00101101.00110010** |
| **2** | **172.30.248.34** | **CLASS B** | **PRIVATE** | **255.255.0.0** | **10101100.00011110.11111000.00100010** |
| **3** | **10.25.100.80** | **CLASS A** | **PRIVATE** | **255.0.0.0** | **00001010.00011001.01100100.01010000** |
| **4** | **192.168.10.100** | **CLASS C** | **PRIVATE** | **255.255.255.0** | **11000000.10101000.00001010.01100100** |

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| **5** | **172.29.157.114** | **CLASS B** | **PRIVATE** | **255.255.0.0** | **10101100.00011101.10011101.01110010** |
| **6** | **228.148.230.109** | **CLASS D** | **PUBLIC** | **255.255.255.255** | **11100100.10010100.11100110.01101101** |
| **7** | **150.108.177.177** | **CLASS B** | **PUBLIC** | **255.255.0.0** | **10010110.01101100.10110001.10110001** |
| **8** | **87.146.254.15** | **CLASS A** | **PUBLIC** | **255.0.0.0** | **01010111.10010010.11111110.00001111** |
| **9** | **163.148.154.200** | **CLASS B** | **PUBLIC** | **255.255.0.0** | **10100011.10010100.10011010.11001000** |
| **10** | **172.35.53.125** | **CLASS B** | **PRIVATE** | **255.255.0.0** | **10101100.00100011.00110101.01111101** |
| **11** | **172.18.221.10** | **CLASS B** | **PRIVATE** | **255.255.0.0** | **10101100.00010010.11011101.00001010** |
| **12** | **192.168.254.10** | **CLASS C** | **PRIVATE** | **255.255.255.0** | **11000000.10101000.11111110.00001010** |
| **13** | **178.145.110.61** | **CLASS B** | **PUBLIC** | **255.255.0.0** | **10110010.10010001.01101110.00111101** |
| **14** | **10.127.200.25** | **CLASS A** | **PRIVATE** | **255.0.0.0** | **00001010.01111111.11001000.00011001** |
| **15** | **198.41.201.236** | **CLASS B** | **PUBLIC** | **255.255.0.0** | **11000110.00101001.11001001.11101100** |
| **16** | **10.0.0.0** | **CLASS B** | **PUBLIC** | **255.255.255.255** | **00001010.00000000.00000000.00000000** |
| **17** | **27.0.0.0** | **CLASS C** | **PUBLIC** | **255.255.255.255** | **00011011.00000000.00000000.00000000** |
| **18** | **224.0.0.0** | **CLASS B** | **PUBLIC** | **255.255.255.255** | **11100000.00000000.00000000.00000000** |
| **19** | **240.0.0.0** | **CLASS C** | **PUBLIC** | **255.255.255.255** | **11110000.00000000.00000000.00000000** |
| **20** | **191.255.255.255** | **CLASS B** | **PUBLIC** | **255.255.0.0** | **10111111.11111111.11111111.11111111** |
| **21** | **223.255.255.255** | **CLASS C** | **PUBLIC** | **255.255.255.0** | **11011111.11111111.11111111.11111111** |
| **22** | **172.31.255.255** | **CLASS B** | **PRIVATE** | **255.255.0.0** | **10101100.00011111.11111111.11111111** |
| **23** | **192.168.255.255** | **CLASS C** | **PRIVATE** | **255.255.255.0** | **11000000.10101000.11111111.11111111** |
| **24** | **128.0.0.0** | **CLASS B** | **PUBLIC** | **255.255.0.0** | **10000000.00000000.00000000.00000000** |
| **25** | **192.0.1.0** | **CLASS C** | **PUBLIC** | **255.255.255.0** | **11000000.00000000.00000001.00000000** |

1. **Using the given binary, Identify its decimal IP equivalent, IP Classes, IP Address Type and Network Mask.**

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|  |  | **IP ADDRESS: BINARY EQUIVALENT** | **IP ADDRESS:**  **DECIMAL EQUIVALENT** | **CLASSFUL IP CLASSES** | **IP ADDRESS TYPE** | **NETWORK MASK** |
| **1 (ex.)** | **01001111.10001111.11101000.11111000** | **79.143.232.248** | **Class A** | **Public** | **255.0.0.0** |
| **2** | **00011101.11001010.00111000.01111100** | **29.202.56.124** | **CLASS A** | **PUBLIC** | **255.0.0.0** |
| **3** | **00001010.01110001.10110101.11100111** | **10.113.181.231** | **CLASS A** | **PRIVATE** | **255.0.0.0** |
| **4** | **10111010.11000001.00111110.10111000** | **186.193.62.184** | **CLASS B** | **PUBLIC** | **255.255.0.0** |
| **5** | **11111100.01100001.11100000.00001000** | **252.97.224.8** | **CLASS E** | **PUBLIC** |  |
| **6** | **11110101.00011010.00111110.00000101** | **245.26.62.5** | **CLASS E** | **PUBLIC** |  |
| **7** | **00001001.01000011.11000011.11100001** | **9.67.195.225** | **CLASS A** | **PUBLIC** | **255.0.0.0** |
| **8** | **11000000.10111010.01000001.00000110** | **192.186.65.6** | **CLASS C** | **PUBLIC** | **255.255.255.0** |
| **9** | **10111011.11010101.10110000.01001001** | **187.213.176.73** | **CLASS B** | **PUBLIC** | **255.255.0.0** |
| **10** | **11111011.11001011.10011100.11001110** | **251.203.156.206** | **CLASS E** | **PUBLIC** |  |
| **11** | **11010001.10111010.11101100.01010001** | **209.186.236.81** | **CLASS C** | **PUBLIC** | **255.255.255.0** |
| **12** | **00111111.00101000.01001010.10000101** | **63.40.74.133** | **CLASS A** | **PUBLIC** | **255.0.0.0** |
| **13** | **11010001.00000011.11111111.11100101** | **209.3.255.229** | **CLASS C** | **PUBLIC** | **255.255.255.0** |
| **14** | **10101100.00011011.01000011.00000111** | **172.27.67.7** | **CLASS B** | **PRIVATE** | **255.255.0.0** |
| **15** | **11000000.10101000.00001111.00011001** | **192.168.15.25** | **CLASS C** | **PRIVATE** | **255.255.255.0** |
| **16** | **10111111.11111111.11111111.11111111** | **191.255.255.255** | **CLASS B** | **PUBLIC** | **255.255.0.0** |
| **17** | **00011011.00000000.00000000.00000000** | **27.0.0.0** | **CLASS A** | **PUBLIC** | **255.0.0.0** |
| **18** | **11000000.00000000.00000001.00000000** | **192.0.1.0** | **CLASS C** | **PUBLIC** | **255.255.255.0** |
| **19** | **11000000.10101000.11111111.11111111** | **192.168.255.255** | **CLASS C** | **PRIVATE** | **255.255.255.0** |
| **20** | **11100000.00000000.00000000.00000000** | **224.0.0.0** | **CLASS D** | **PUBLIC** | **255.255.255.255** |
| **21** | **10101100.00011111.11111111.11111111** | **172.31.255.255** | **CLASS B** | **PRIVATE** | **255.255.0.0** |
| **22** | **00001010.00000000.00000000.00000000** | **10.0.0.0** | **CLASS A** | **PRIVATE** | **255.0.0.0** |
| **23** | **11000000.00110000.00000001.00001100** | **192.48.1.12** | **CLASS C** | **PUBLIC** | **255.255.255.0** |
| **24** | **11001100.00001000.00000001.00000011** | **204.8.1.3** | **CLASS C** | **PUBLIC** | **255.255.255.0** |
| **25** | **10101100.00011001.11110011.10011101** | **172.25.243.157** | **CLASS B** | **PRIVATE** | **255.255.0.0** |
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