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| **Rack 1** |
| 1.B1 |
| 2. |
| 3. B4 |
| 4. |
| 5. |
| 6. B6 |

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| We Have 5 Different Racks in Our Hadoop Cluster Each Rack Contains 6 Data Nodes. Now Suppose We Have 6 Blocks (B1, B2, B3, B4, B5, B6) That We Want to Put in This Node. As We All Know Hadoop Has a Feature to Make Replicas for The File Blocks to Provide the High Availability and Fault Tolerance, By Default the Replication Factor Is 3 So Hadoop Is So Smart That It Will Place the Replicas of Blocks in Racks in Such a Way That We Can Achieve a Good Network Bandwidth. For That Hadoop Has Some Tack Awareness Policies. |

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| **Rack 2** |
| 7. B1 |
| 8 .B1,B2 |
| 9.B6 |
| 10. |
| 11. |
| 12. |

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| **Rack 3** |
| 13. |
| 14. B2 |
| 15. B2,B6 |
| 16. B3, B6 |
| 17. |
| 18. |

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| **Rack 4** |
| 19. |
| 20. |
| 21. |
| 22. |
| 23. B3 |
| 24. B3,B4 |

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| **Rack 5** |
| 25. |
| 26. B4 |
| 27. B4 |
| 28. B5 |
| 29. |
| 30. |