Module 6D

Understanding Database Options

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| features | rating criteria | MSSQL | Oracle | SQLite | MySQL (MariaDB) | PostgreSQL | Microsoft Access | LibreOffice Base |
| Concurrency(3) | 3 | 3x4=12 | 3x4=12 | 3x3=9 | 3x4=12 | 3x5=15 | 3x2=6 | 3x2=6 |
| Replication(1) | 1 | 1x5=5 | 1x5=5 | 1x3=3 | 1x5=5 | 1x5=5 | 1x1=1 | 1x1=1 |
| Easy firewall(4) | 4 | 4x5=20 | 4x5=20 | 4x3=12 | 4x4=16 | 4x4=16 | 4x2=8 | 4x1=4 |
| Low cost(5) | 5 | 5x3=15 | 5x3=15 | 5x5=25 | 5x5=25 | 5x4=20 | 5x2=10 | 5x2=10 |
| Performance(4) | 4 | 4x4=16 | 4x4=16 | 4x3=12 | 4x5=20 | 4x5=20 | 4x2=8 | 4x1=4 |
| Python-compatible(5) | 5 | 5x4=20 | 5x5=20 | 5x5=25 | 5x5=25 | 5x5=25 | 5x5=25 | 5x1=5 |
| Networkable(4) | 4 | 4x4=16 | 4x4=16 | 4x3=12 | 4x5=20 | 4x4=16 | 4x3=12 | 4x2=8 |
| Backup & retrieve(5) | 5 | 5x5=25 | 5x5=25 | 5x4=20 | 5x4=20 | 5x4=20 | 5x3=15 | 5x2=10 |
| simplicity(4) | 4 | 4x3=12 | 4x3=12 | 4x5=20 | 4x4=16 | 4x4=16 | 4x2=8 | 4x2=8 |
| Sum |  | 129 | 129 | 118 | 159 | 137 | 65 | 48 |
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Based on my research the best database options to use are preferably MySQL and PostgreSQL based on low cost, the performance of the database, its compatibility with Python, firewall, backup & restoration of the database due to the high criteria requirement it met with the different databases.