|  |  |  |
| --- | --- | --- |
| **BFS** | Step | List |
|  | 0 | A |
|  | 1 | B, C, D, E |
|  | 2 | C, D, E, F |
|  | 3 | D, E, F, G |
|  | 4 | E, F, G, H |
|  | 5 | F, G, H, Z |
|  |  | Found Goal State – Z |
|  |  |  |
| **DFS** | Step | List |
|  | 0 | A |
|  | 1 | B, C, D, E |
|  | 2 | C, D, E, F |
|  | 3 | D, E, F, G |
|  | 4 | E, F, G, H |
|  | 5 | F, G, H, Z |
|  |  | Found Goal State - Z |
|  |  |  |
| **IDS** | Step | List |
|  | 0 | A |
|  | 1 | B |
|  | 2 | F |
|  | 3 | I, L |
|  | 4 | I, G, |
|  | 5 | G, C, J |
|  | 6 | C, A |
|  | 7 | D |
|  | 8 | H |
|  | 9 | J, K |
|  | 10 | K |
|  | 11 | Z |
|  |  | Found Goal State - Z |
|  |  |  |
| **A\*** | Step | List |
|  | 0 | A |
|  | 1 | B, C, D, E |
|  | 2 | F |
|  | 3 | L, I |
|  | 4 | Z |
|  |  | Found Goal State – Z |

|  |  |  |
| --- | --- | --- |
| Domains | Agenda | Arc |
| X = {1,…,10} -> {6, 7, 8, 9, 10} -> {9, 10} | X > Y | X > Y |
| Y = {5,…,15} -> {5, 6, 7} | Y + Z = 12 | Y < X |
| Z = {5,…, 20} -> {5, 6, 7} | X + Z = 16 | Y + Z = 12 |
| X > Y |  | X + Z = 16 |
| Y + Z = 12 |  |  |
| X + Z = 16 |  |  |