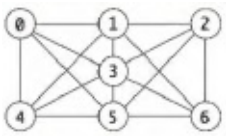
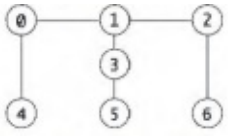
1. Represent the following graphs using adjacency lists.

Graph 1




0 -> 1, 3, 4, 5
1 -> 0, 2, 3, 4
2 -> 1, 3, 5, 6
3 -> 0, 1, 2, 4, 5, 6

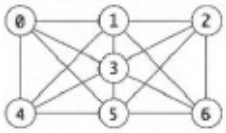
Graph 2




0 -> 1, 4
1 -> 0, 2, 3
2 -> 1, 6
3 -> 1, 5

2. Represent the graphs in Exercise 1 above using an adjacency matrix.

Graph 1

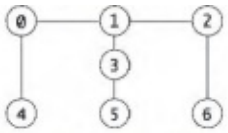



Column

Row

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| 0 | | 1 | | 1 | 1 | 1 | |
| 1 | 1 | | 1 | | 1 | | 1 |
| 2 | | 1 | | 1 | | 1 | 1 |
| 3 | 1 | | 1 | | 1 | | 1 |
| 4 | 1 | 1 | | 1 | | 1 | |
| 5 | 1 | | 1 | | 1 | | 1 |
| 6 | | 1 | 1 | 1 | | 1 | |

Graph 2




Column

Row

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| 0 | | 1 | | | 1 | | |
| 1 | 1 | | 1 | 1 | | | |
| 2 | | 1 | | | | | 1 |
| 3 | | 1 | | | | 1 | |
| 4 | 1 | | | | | | |
| 5 | | | | 1 | | | |
| 6 | | | 1 | | | | |