Analysis of Algorithms: Results of Assignment 7

| | | | | | | Х | | | | | | | Х |
|-----------|---|--------|---|---|---|-------|---|---|-------|---|----|----|----|
| | | | | | | X | | | | | | | X |
| number of | | | | | | X | | | | | | | X |
| homeworks | | | | | | X | | | | | X | | X |
| | | | | | | X | | | | | X | | X |
| | | | | | | X | | | X | X | X | X | X |
| | | | X | | X | X | | X | X | X | X | X | X |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | grades | | | | | | | | | | | |

The histogram shows the distribution of grades for the homeworks submitted on time, in-cluding the early-submission bonus.

The output of the BFS and DFS algorithms depends on the order of vertices in the adjacency lists of the input graph. The following table shows *all* possible outputs of correctly implemented algorithms, for the graph given in the assignment.

| Co | rı | e | ct | BFS | | outputs | | Correct | | | | DFS | | outputs | | | | |
|----|----|---|----|-----|---|---------|---|---------|---|---|---|-----|---|---------|---|---|---|----|
| 1 | 2 | 4 | 8 | 3 | 5 | 7 | 9 | | 1 | 2 | 3 | 5 | 9 | 4 | 7 | 8 | 6 | 10 |
| 1 | 2 | 4 | 8 | 5 | 3 | 7 | 9 | 1 | 1 | 2 | 3 | 5 | 9 | 8 | 4 | 7 | 6 | 10 |
| 1 | 2 | 8 | 4 | 3 | 5 | 7 | 9 | 1 | 1 | 2 | 5 | 9 | 3 | 4 | 7 | 8 | 6 | 10 |
| 1 | 2 | 8 | 4 | 5 | 3 | 7 | 9 | 1 | 1 | 2 | 5 | 9 | 3 | 8 | 4 | 7 | 6 | 10 |
| 1 | 4 | 2 | 8 | 7 | 3 | 5 | 9 | 1 | 1 | 4 | 7 | 8 | 2 | 3 | 5 | 9 | 6 | 10 |
| 1 | 4 | 2 | 8 | 7 | 5 | 3 | 9 | 1 | 1 | 4 | 7 | 8 | 2 | 5 | 9 | 3 | 6 | 10 |
| 1 | 4 | 8 | 2 | 7 | 3 | 5 | 9 | | 1 | 8 | 4 | 7 | 2 | 3 | 5 | 9 | 6 | 10 |
| 1 | 4 | 8 | 2 | 7 | 5 | 3 | 9 | 1 | 1 | 8 | 4 | 7 | 2 | 5 | 9 | 3 | 6 | 10 |
| 1 | 8 | 2 | 4 | 3 | 5 | 7 | 9 | 1 | | | | | | | | | | |
| 1 | 8 | 2 | 4 | 5 | 3 | 7 | 9 | 1 | | | | | | | | | | |
| 1 | 8 | 4 | 2 | 7 | 3 | 5 | 9 | 1 | | | | | | | | | | |
| 1 | 8 | 4 | 2 | 7 | 5 | 3 | 9 | | | | | | | | | | | |