CS3345 Exam 2

Question 6

Drew Pulliam – DTP18003

Show all of the trees before and after a find(5) when path compression is used.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| start | -7 | 0 | 0 | 2 | 3 | 4 | 5 | -4 | 7 | 7 | 7 |
| Find(5) | -7 | 0 | 0 | 0 | 0 | 0 | 5 | -4 | 7 | 7 | 7 |