

Question 1

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- What are all the (listed) ancestors of *Russian*?
Slavic, Proto-indo-european
 - What are all the (listed) descendants of *Indo – iranian*?
Persian, Sanskrit, Hindi, Urdu
 - What are all the (listed) siblings of *Polish*?
Russian and Bulgarian
 - What are all the (listed) leaves of the tree?
Polish, Russian, Bulgarian, Persian, Hindi, Urdu
-

Question 2

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- Write out all the Nodes in the path from *Lab 13* to *C:*. Lab 13 → CS 250 → School → C:\
- What is the length of the path from *Lab 13* to *C:*? 3
- Find the Depths and Heights for the following:

| Node | Depth | Height |
|--------|-------|--------|
| Lab 13 | 3 | 0 |
| Ch 7.3 | 3 | 0 |
| Tacos | 2 | 0 |
| MGSV | 2 | 0 |
| CS 211 | 2 | 1 |
| School | 1 | 2 |

Question 3

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Traverse the following tree using **pre-order** traversal. Write out each Node as you “process” it. H I W U T S U P

Question 4

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Traverse the following tree using **post-order** traversal. Write out each Node as you “process” it.

C A T S R G O O D

Question 5

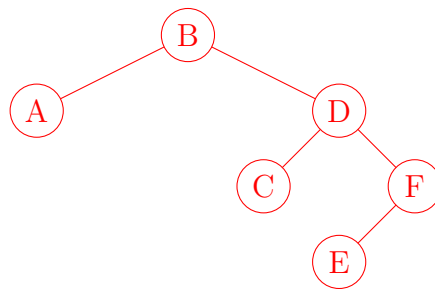
____ / 2

Traverse the following tree using **in-order** traversal. Write out each Node as you “process” it.

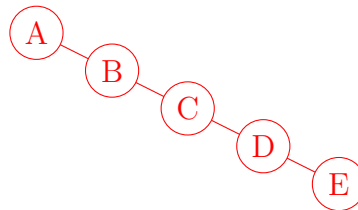
G R A P H S

Question 6

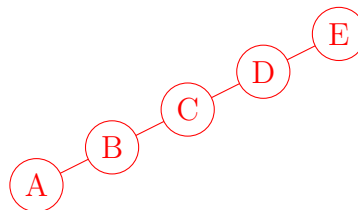
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a. Add: B, A, D, C, F, E



b. Add: A, B, C, D, E



c. Add: E, D, C, B, A

Question 7

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a. B, A, D, C

```
nodeB->ptrLeft = &nodeA;  
nodeB->ptrRight = &nodeD;  
nodeD->ptrLeft = &nodeC;
```

b. A, B, C, D

```
nodeA->ptrRight = &nodeB;  
nodeB->ptrRight = &nodeC;  
nodeC->ptrRight = &nodeD;
```

c. D, C, B, A

```
nodeD->ptrLeft = &nodeC;  
nodeC->ptrLeft = &nodeB;  
nodeB->ptrLeft = &nodeA;
```

0.0.1 Thinking in subtreesWIP
