# CO202 – Software Engineering – Algorithms Radix Search - Solutions

## **Exercise 1: Digital Search Trees**

Draw the DST that results when you insert the following keys in that order into an initially empty tree

-	
Е	00101
Α	00001
S	10011
Υ	11001
Q	10001
U	10101
Т	10100
I	01001
0	01111
N	01110

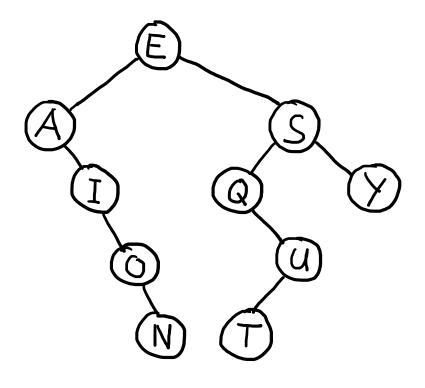
EASYQUTION

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Draw the DST that results when you insert the following keys in that order into an initially empty tree

00101
00001
10011
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01110

#### EASYQUTION



## **Exercise 2: Binary Search Tries**

Draw the binary trie that results when you insert the following keys in that order into an initially empty trie

Е	00101
Α	00001
S	10011
Υ	11001
Q	10001
U	10101
Т	10100
I	01001
0	01111
N	01110

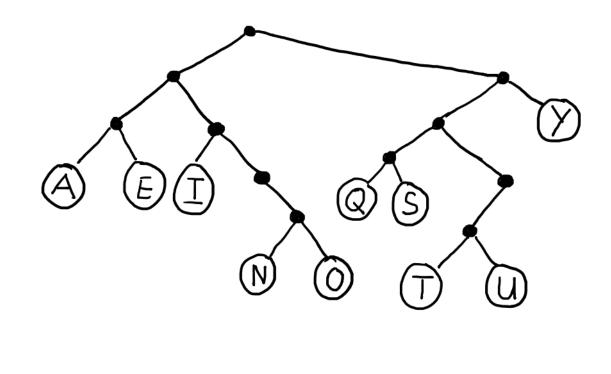
EASYQUTION

## **Exercise 2: Binary Search Tries**

Draw the binary trie that results when you insert the following keys in that order into an initially empty trie

E	00101
Α	00001
S	10011
Y	11001
Q	10001
U	10101
Т	10100
I	01001
0	01111
N	01110

### EASYQUTION



#### **Exercise 3: Patricia Tries**

Draw the Patricia trie that results when you insert the following keys in that order into an initially empty trie

Е	00101
Α	00001
S	10011
Υ	11001
Q	10001
U	10101
Т	10100
I	01001
0	01111
N	01110

EASYQUTION

#### **Exercise 3: Patricia Tries**

Draw the Patricia trie that results when you insert the following keys in that order into an initially empty trie

Е	00101
Α	00001
S	10011
Y	11001
Q	10001
U	10101
Т	10100
I	01001
0	01111
N	01110

E A S Y Q U T I O N

#### **Exercise 3: Patricia Tries**

Draw the Patricia trie that results when you insert the following keys in that order into an initially empty trie

E	00101
Α	00001
S	10011
<b>Y</b>	11001
Q	10001
U	10101
Т	10100
I	01001
0	01111
N	01110

