

- Which of the following is not a typical example of tree traversal?
 - Pre Order Traversal
 - Post Order Traversal
 - In Order Traversal
 - **Reverse Order Traversal (*)**
- In the following tree what would be the result of a In-Order Traversal?

 - 123456
 - 4275631
 - **4217536 (*)**
 - 1243576
- In the following tree, what would be the result of a Pre-Order Traversal?

 - 123456
 - 4275631
 - 4217536
 - **1243576 (*)**
- In a decision tree, it doesn't matter which questions you start with.
 - True
 - **False (*)**
- Must every node in a tree have a parent?
 - True
 - **False (*)**
- Trees are very useful for representing hierarchical structures.
 - **True (*)**
 - False
- This is an example of a recursive method


```
int power(int a, int n) {
    int result = 1;
    for(int i=0;i<n;i++) {
        result *= a;
    }
    return result;
}
```

 - True
 - **False (*)**
- If you create no base case in a recursive method then you will create:

- A quicker method
 - A more efficient method
 - **An infinite loop (*)**
 - An iterative method
- Recursive methods can always be written as iterative methods.
 - **True (*)**
 - False
- Decision trees can only be represented using binary trees.
 - True
 - **False (*)**
- The difference between a tree and a binary tree structure is:
 - **A binary tree is restricted to a maximum of 2 siblings (*)**
 - A binary tree is based around the notion of a root node
 - A non binary tree cannot be traversed
 - A non binary tree does not have leaf nodes
- ID3 is short for:
 - Interactive Dichotomiser 3
 - Intersectional Dichotomiser 3
 - **Iterative Dichotomiser 3 (*)**
 - Institutional Dichotomiser 3
- C4.5 is the successor to ID3.
 - **True (*)**
 - False
- Variance is:
 - How average of all data items
 - **How far data is spread out (*)**
 - The difference between the largest and smallest item
 - Measures the relationship between all items
- Which of the following has the greatest variance?
 - 0,0,0,0
 - 1,2,3,4

- 1,1,2,2,3,3
- **1,50,100,2000 (*)**