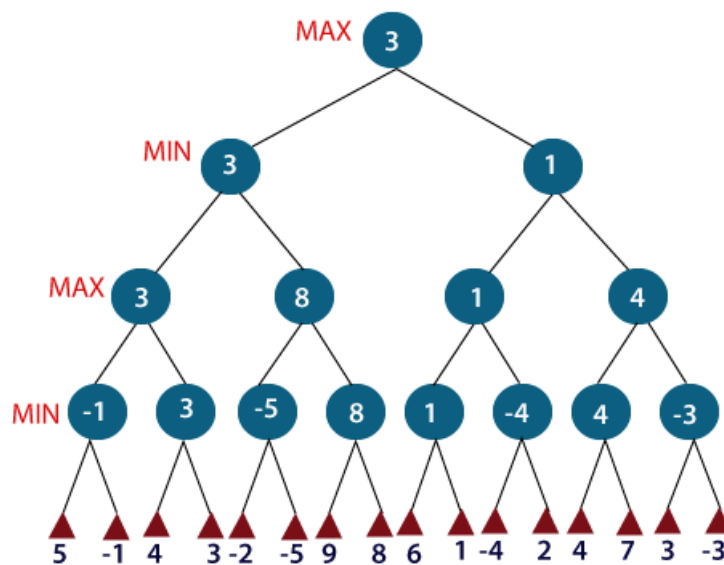Experiment 4

Foundations of AI

Minimax algorithm

By- Shivansh Jain,VIT Chennai

AIM:-

To find the optimal score from the scores of leaf nodes using minimax algorithm
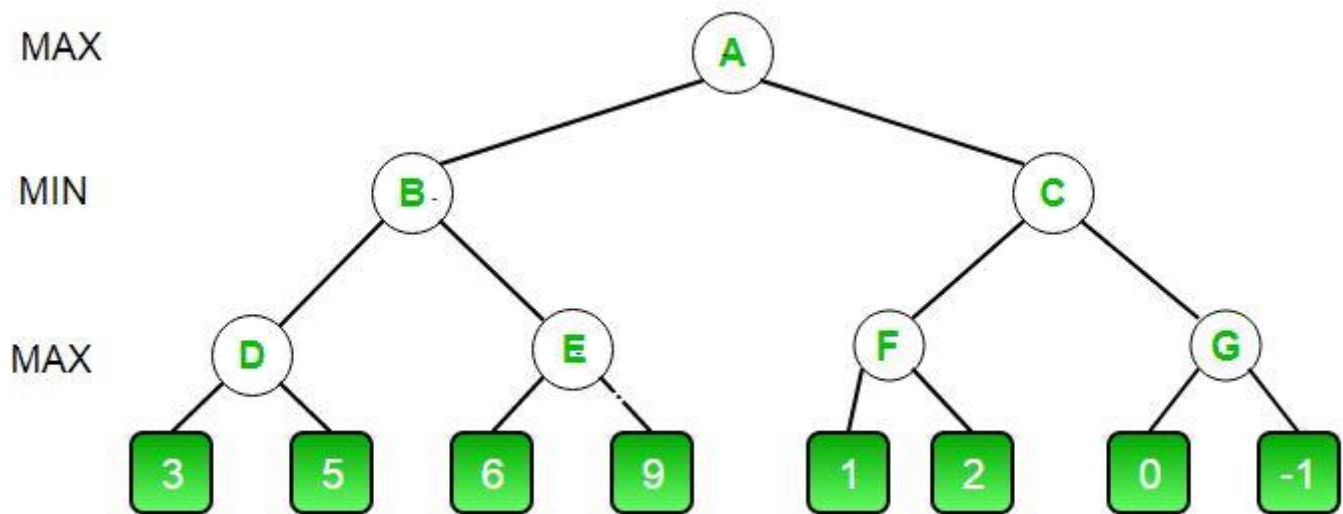
RESULTS AND OUTPUT:-

Test case 1:-

Output

```
> test_case2 = c(5, -1,4,3,-2,-5,9,8,6,1,-4,2,4,7,3,-3)
> len2=length(test_case2)
> treeDepth2 = ceiling(log(len2, base=2))
> minimax(0, 1, TRUE, test_case2, treeDepth2)
[1] 3
>
```

Test case 2:-

MAX — A
MIN — B, C
MAX — D, E, F, G

3 5 6 9 1 2 0 -1

Output:-

```
> test_case1 = c(3, 5, 6, 9, 1, 2, 0, -1)
> len1=length(test_case1)
> treeDepth1 = ceiling(log(len1, base=2))
> minimax(0, 1, TRUE, test_case1, treeDepth1)
[1] 5
>
```