

# National University of Computer & Emerging Sciences, Karachi Computer Science Department



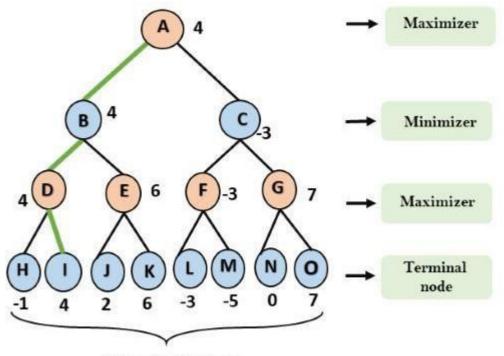
Spring 2023, Lab Manual - 07

| Course Code: Al-2002 | Course: Artificial Intelligence Lab                        |
|----------------------|--|
| Instructor(s):       | Kariz Kamal, Saeeda Kanwal, Sania Urooj,<br>Muhammad Osaid |

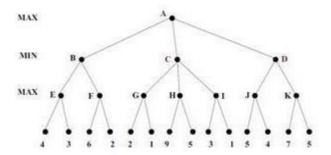
## Lab Tasks

## **Task#1:**

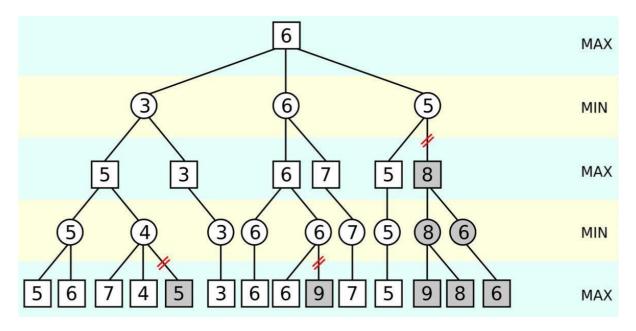
Implement the following tree using minimax algorithm.



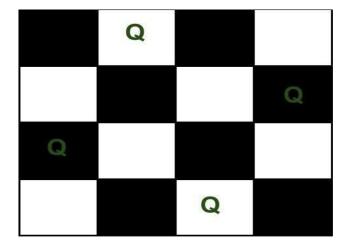
Terminal values



**Task#2:**Solve the below tree by using alpha-beta pruning method.



**Task#3:** Implement N-Queen Problem in Constraint Satisfaction Problem.



## **Task # 4:**

Implement CSP to allocate resources such as computer servers or office space, taking into account the needs of different departments or projects, the availability of resources, and any budget constraints.

## **Task #5:**

How Adversarial search differ from other searching algorithm?