


National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Artificial Intelligence	Course Code:	CS 401
	Program:	BS(CS)	Semester:	Spring 2020
	Duration:	40 Minutes	Total Points:	10
	Paper Date:	Tuesday, 02 June, 2020	Weight	1%
	Section:	E, F	Page(s):	1
	Exam Type:	Review Quiz No 1		

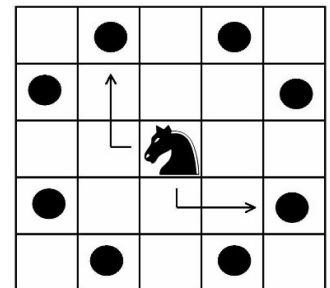
Student : Name: _____ Registration No. _____

Problem [Search]

[2.5 x 4 Points]

A knight's tour is a sequence of moves of a knight starting from a starting position on a chessboard such that the knight visits every square only once.

In this problem you are required to pose this problem as a search problem so that it might be solved using various search algorithms discussed throughout the semester.



Knight's Moves

Describe a minimal **state** and the corresponding **successor function** needed to solve this problem using A* search algorithm

STATE:

SUCCESSOR FUNCTION:

Goal Test

Step/Path Cost