

# Artificial Intelligence Lab

## Lab 2 Manual

*[Submit your source file only  
Name your file like this "regno1\_regno\_2\_lab1.cpp/py/c/java"]  
\*\*Report to me when you've completed any checkpoint*

### Task:

Suppose, you're given a floor along with its initial condition with some dirt (D) at different locations and the vacuum cleaner's starting location (V). You want your floor cleaned. You calculate the performance of the vacuum cleaner using its energy consumption. The less the consumption, the better the performance.

			D						D
	D				D				
				D				D	
	D								
							D		
						D			
V		D						D	

**Checkpoint 1:** **20%**

Build a graph to representing the states.

**Checkpoint 1:** **40%**

Use DFS to clean the floor. Calculate the cost.

**Checkpoint 2:** **40%**

Use BFS to clean the floor. Calculate the cost.