

**Tribhuvan University**

**Faculty of Humanities and Social Sciences**

Artificial Intelligence

A LAB REPORT

Submitted to

Department of Computer Application

Shahid Smarak College

*In partial fulfillment of the requirements for the Bachelors in Computer Application*

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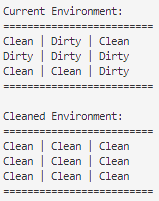
# Question – 1

Write a python program for the implementation of vacuum cleaner.

**Code:**



**Output:**

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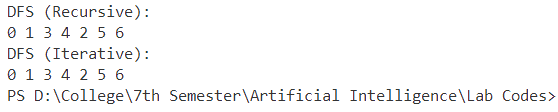
# Question – 2

Write a python program for the implementation of depth first search (DFS).

**Code:**

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**Output:**

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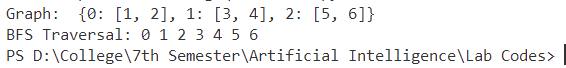
# Question – 3

Write a python program for the implementation of breadth first search (BFS).

**Code:**

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**Output:**



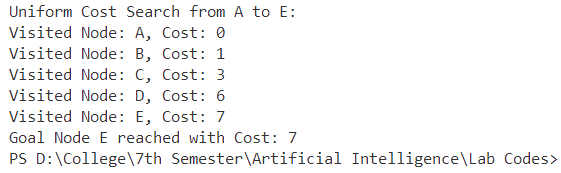
# Question – 4

Write a python program for the implementation of uniform cost search.

**Code:**

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**Output:**

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# Question – 5

Write a python program for the implementation of greedy best first search.

**Code:**

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**Output:**



# Question – 6

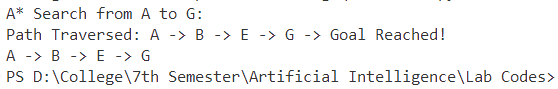
Write a python program for the implementation of A\* search.

**Code:**

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**Output:**



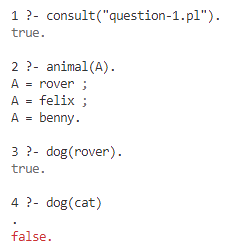
# Question – 7

Write a program to implement logic programming using prolog.

**Code:**

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**Output:**



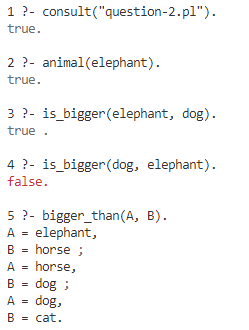
# Question – 8

Write a prolog program to represent few basic facts and perform queries (Elephant is an animal. Elephant is bigger than horse) etc.

**Code:**

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**Output:**

****

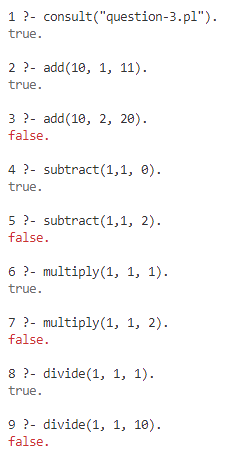
# Question – 9

Write a program in prolog to implement simple arithmetic.

**Code:**

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**Output:**



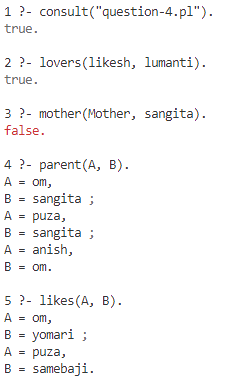
# Question – 10

Write a prolog program to convert the sentences into FOPL and to execute queries

**Code:**

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**Output:**

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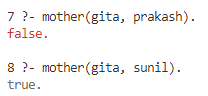
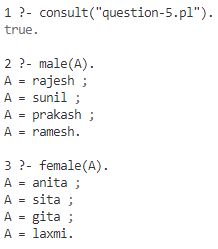
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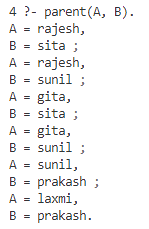
Write a prolog program to create a knowledge base of sentences and to execute queries.

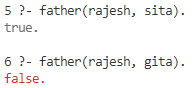
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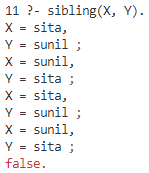
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**Output:**

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# Question – 12

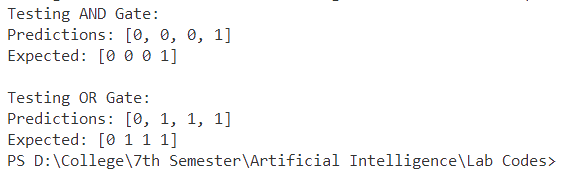
Write a python program to implement AND, OR gate using perceptron algorithm.

**Code:**

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**Output:**

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# Question – 13

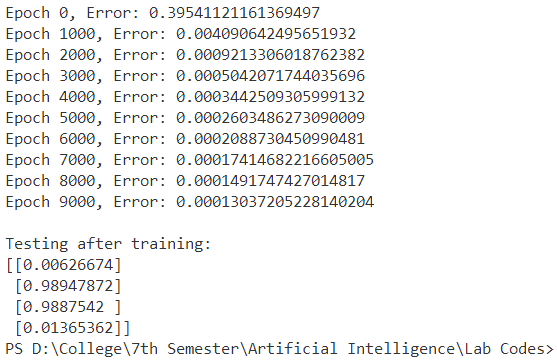
Write a python program to illustrate working of backpropagation algorithm.

**Code:**

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**Output:**

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