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**Ahsanullah University of Science & Technology**

**Department of Computer Science & Engineering**

**Course No. :** CSE 4108

**Course Name :** Artificial Intelligence Lab

**Assignment No. :** 03

**Submitted To :**

Md. Siam Ansary Tonmoy Hossain

Department of CSE, AUST Department of CSE, AUST

**Submitted By:**

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ID No. : 170204089

Session : Fall 2020

Section : B

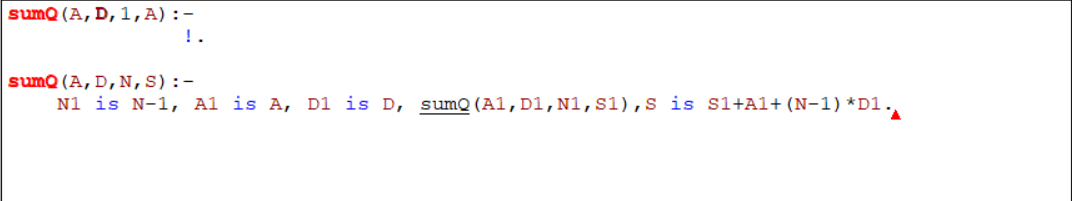
Lab group : B2

**Date of Submission:** August 18, 2021

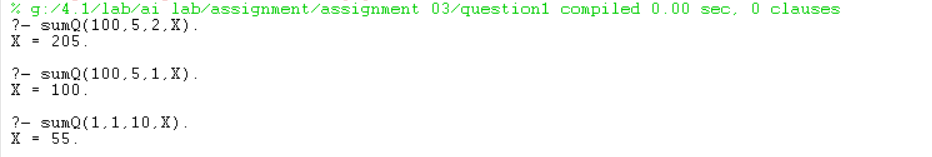
**QUESTION 01:** Define a recursive procedure in Python and in Prolog to find the sum of 1st n terms of an equal-interval series given the 1st term and the interval.

**ANSWER:**

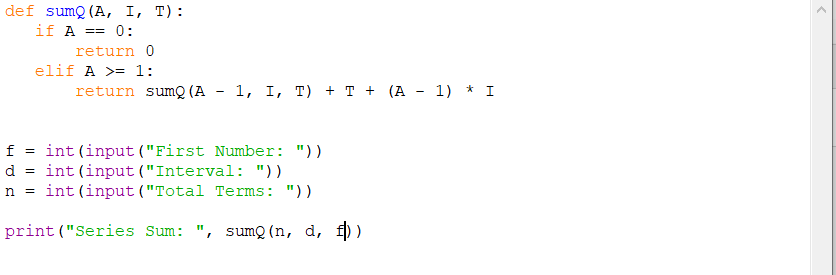
**Code in Prolog:**

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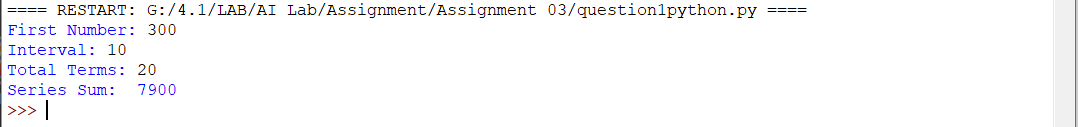
**Output:**

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**Code in Python:**

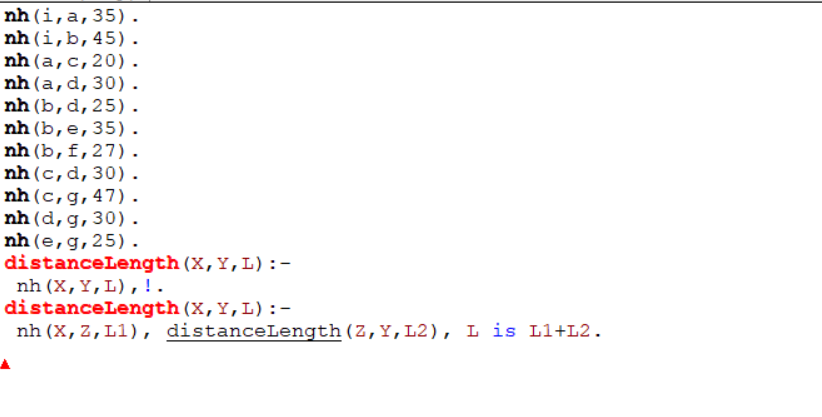
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**Output:**

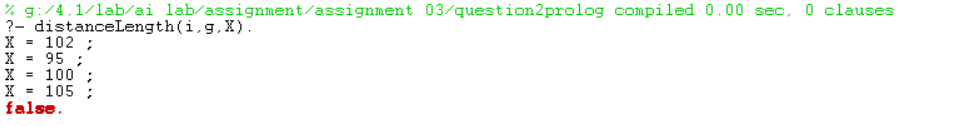
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**QUESTION 02:** Define a recursive procedure in Python and in Prolog to find the length of path between two vertices of a directed weighted graph.

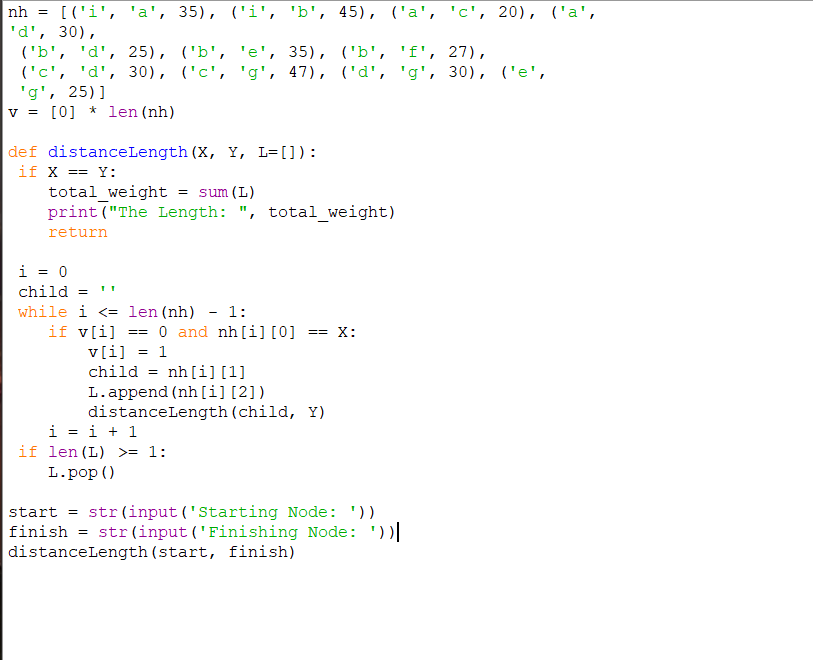
**Prolog Code:**



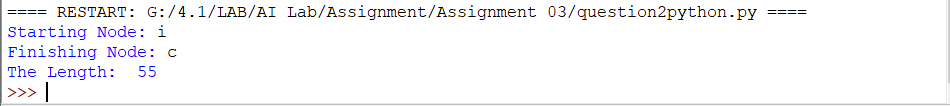
**Output:**



**Python Code:**

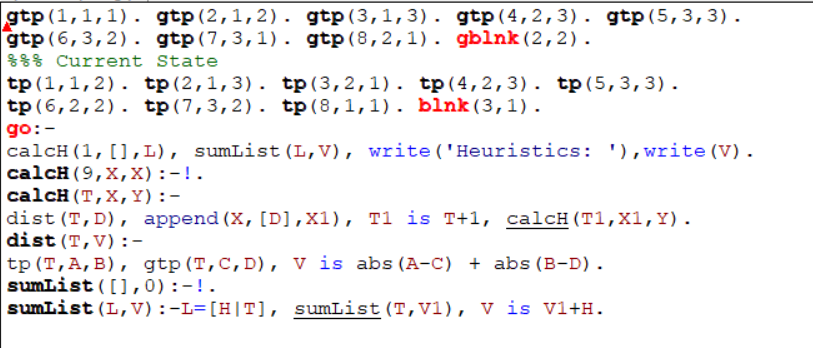
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**Output**

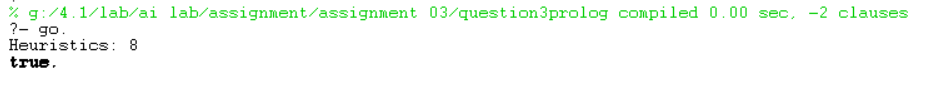
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**QUESTION 03:** Write the Python and Prolog codes to find discussed h2.

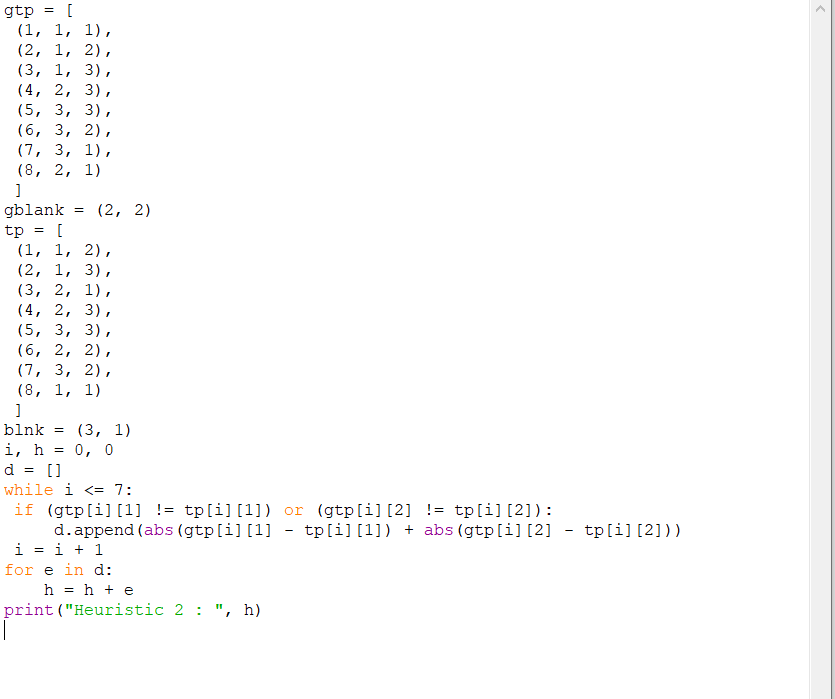
**Prolog Code:**



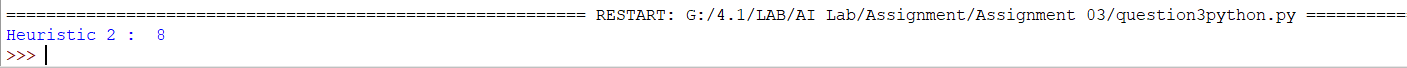
**Output:**

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**Python Code**

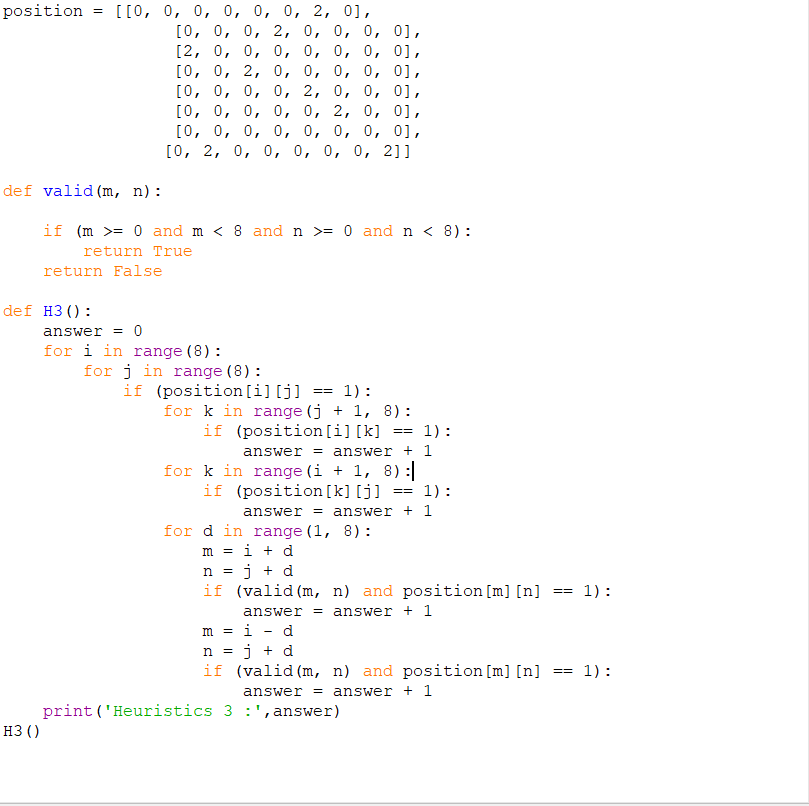
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**Output:**

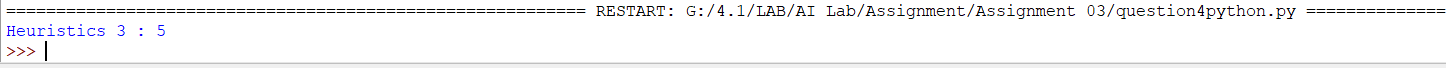
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**Question 4:** Write the Python code to find discussed h3.

**Python Code:**

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**Output:**

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