INSTITUTE OF INFORMATION TECHNOLOGY

JAHANGIRNAGAR UNIVERSITY
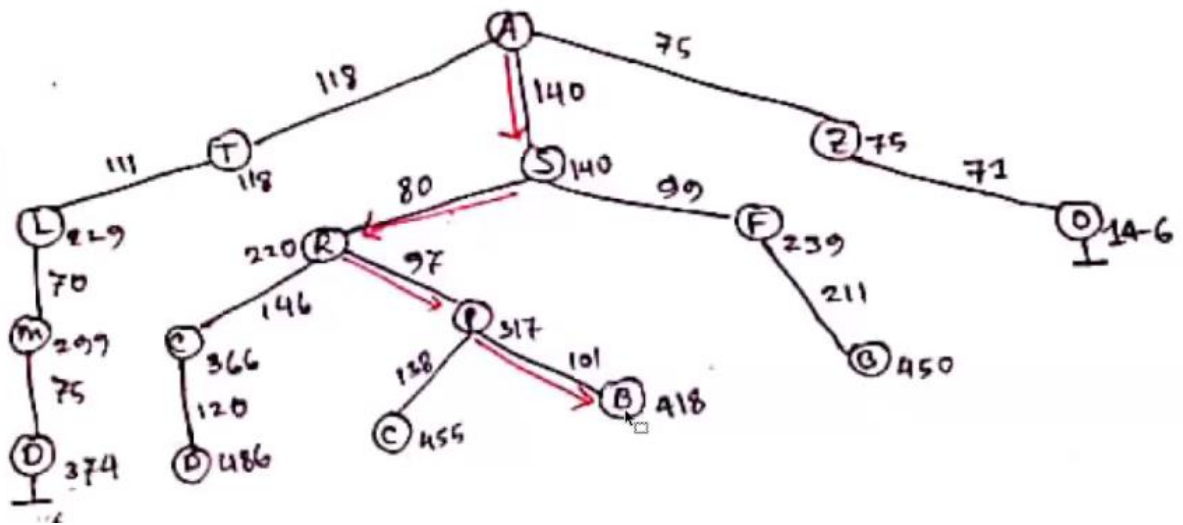
Number of Assignment **:** 01

Submission Date **:** 24/07/2023

Course Tittle **:** Artificial Intelligence

Course Code **:** ICT - 4101

Submitted To

Dr. Mohammad Shahidul Islam

Professor

IIT – JU

Submitted By

Md. Shakil Hossain

Roll – 2023

4th year 1st Semester

IIT – JU

Current state	Edge states	Visited states
A (0) →	T(118), S(140), Z(75)	A
Z (75) →	O (146), S(140), T(118)	A, Z
T (118) →	L (229), S(140), O(146)	A, Z, T
S (140) →	L(229), O(146), R(220), F(239)	A, Z, T, S
O (146) →	Dead end	A, Z, T, S, O
R (220) →	L(229), F(239), C(366), P(317)	A, Z, T, S, O, R
L (229) →	F(239), C(366), P(317), M(299)	A, Z, T, S, O, R, L
M (299) →	F(239), C(366), P(317), D(374)	A, Z, T, S, O, R, L, M
F (239) →	B (450), C(366), P(317), D(374)	A, Z, T, S, O, R, L, M, F
P (317) →	B (418), C(455), C(366), P(317), D(374)	A, Z, T, S, O, R, L, M, F
C (366) →	D(486), B(418), C(455), D(374)	A, Z, T, S, O, R, L, M, F, C
D (374) →	Dead end	A, Z, T, S, O, R, L, M, F, C
B (418) →	Goal!	Found!

<u>path</u> :- Arcad → Sibiu → Rimnicu Vilcea →
   pilesti → Bucharest

<u>path cost</u>: 140 + 80 + 97 + 101 = 418.