Name :- Abdullah Bin Noman Tobid

Student ID:- 212018003 1

Course Code :- CSI - 341

Course Title :- Artificial Intelligence

"Final Exam"

Ans to the Q No 1

(a)

Lists of blind search algorithm are-

a) Breadth First Search.

b) Uniform Cost Search.

c) Depth First Search.

d) Depth Limited Search

e) Iterative Deepening search

f) checking for Repeated states.

Properties:-

1) It has breadth and depth first search.

2) It is easy to use.

3) [illegible] is usable.

[illegible] is popular.

(b)

The four general steps of problem solving are-

1) Analyze: Understand the root cause.

2) Plan: Determine how to resolve the problem.

3) Implement: Put the resolution in place. It is very important step from four of the steps. It is very easy step of problem solving.

4) Evaluate: Determine if the resolution is producing the desired results. It is also very important process.

3

Ans. to the Q.N. 3

(a)

DFS search strategy:

1, 2, 4, 6, 5, 3, 6, 9, 7.

(b)

The appropriate search strategy for the above tree is DFS. It is very important process.

In DFS search strategy, we can find different ways. At first, it starts with initial state and then Left and then

right.

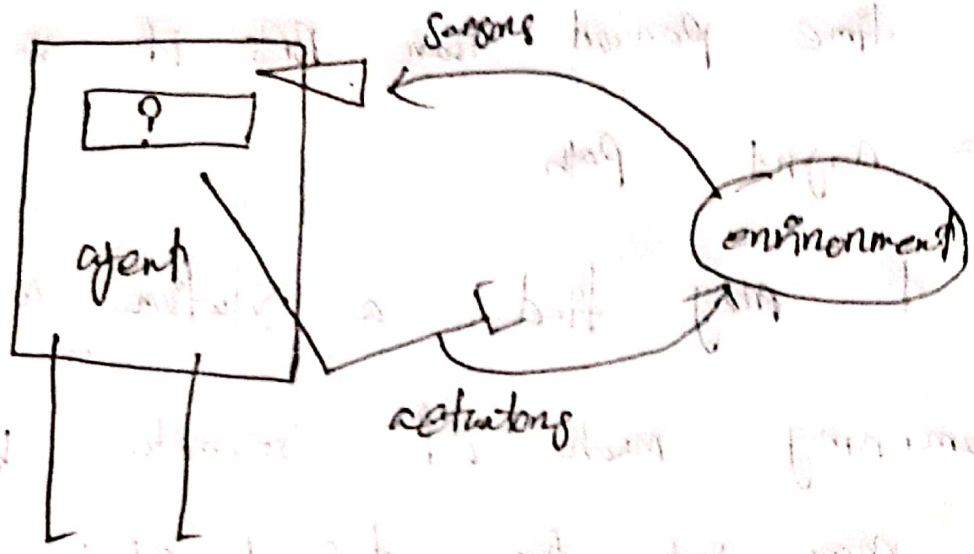
But in BFS, we can find difficult ways. But in DFS, the steps are not complicated; Complicated things using int a good strategy. So, we can use the DFS strategy ner easily.

So, we can surely find out that DFS is a good strategy to use.

Ans-to-the-Q No 4

(a)

An agent that tries to come up with a sequence of actions that will bring the environment into a desired state!!



(b) - problem solving agent.

(iv)

Limitations:

Advantages:

a) DFS consumes very less memory space.

b) It will reach at the goal node in a less time period than BFS if it traverses in a right path.

c) It may find a solution without examining much of search because we may get the desired solution in the very first go.

Disadvantages:

a) It is possible that may states keep of recurring more is no guarantee

finding the goal node.

(b) Sometimes the states may also enter into infinite loops.

Ans for the Q No 5

(a)

Solutions:

(a) Do not return to the parent state.

(b) Do not create solution paths with cycles.

(c) Do not generate any repeated states.

(d) problem formulation.

(e) Formulating problems.

(f) knowledge and problem types.

(g) [illegible] should be used properly.

(h) Example problems should be stored properly.

(i) Problem solving performance should be measured properly.

These are solutions of avoiding repeated states. We can use these steps and gain control properly

(b) Some real word problems are given here-

(1) We can measure incorrectly.

(2) Calculation can be incorrect.

(3) We can write incorrect digits.

(4) We can use false code.

(5) It can be complicated.

(6) Sometimes we can see false incorrect question.

(7) In real world there are many other problems.

These are the real world problems

Q1

of searching algorithms.