dfs.pl [modified]

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dfs.pl [modified]

```
edge(a,b).
edge(a,c).
edge(b,d).
edge(b,e).
edge(c,f).

dfs(Start, Goal, Path) :-
    dfs_recursive(Start, Goal, [], Path).

dfs_recursive(Current, Current, Visited, [Current | Visited]).



dfs_recursive(Start, Goal, Visited, Path) :-
    edge(Start, Next),
    \+ member(Next, Visited),F
    dfs_recursive(Next, Goal, [Start | Visited], Path).
```

SWI-Prolog (AMD64, Multi-threaded, version 9.0.4)

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```
clear .
?-
% c:/users/admin/documents/prolog/dfs compiled 0.02 sec, 0 clauses
?- dfs(a, f, Path).
Path = [f, c, a]
```

jupyter DFS Last Checkpoint: 6 minutes ago

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Code

#DFS

[6]:
```
def dfs(graph, visited, root):
    if root not in visited:
        print(root)
        visited.add(root)
        for neighbour in graph[root]:
            dfs(graph, visited, neighbour)


graph = {
    'A':['B', 'C', 'D'],
    'B':['E'],
    'C':['D', 'E'],
    'D':[],
    'E':[]
}

visited = set()
dfs(graph, visited, 'A')
```

```
A
B
E
C
D
```

[ ]: