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Question: Below are the provided BFS and DFS Algorithms. Convert these algorithms into a Python code and apply them over the graph of Romanian cities (provided at the end).

Algorithms:

BFS:

function breadth_first_search;

```
begin
   open := [Start];                                              % initialize
   closed := [ ];
   while open ≠ [ ] do                                          % states remain
      begin
         remove leftmost state from open, call it X;
            if X is a goal then return SUCCESS                   % goal found
               else begin
                  generate children of X;
                  put X on closed;
                  discard children of X if already on open or closed;   % loop check
                  put remaining children on right end of open            % queue
               end
      end
   return FAIL                                                   % no states left
end.
```

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DFS:

```
begin
   open := [Start];                                                    % initialize
   closed := [ ];
   while open ≠ [ ] do                                                 % states remain
       begin
          remove leftmost state from open, call it X;
          if X is a goal then return SUCCESS                          % goal found
             else begin
                generate children of X;
                put X on closed;
                discard children of X if already on open or closed;    % loop check
                put remaining children on left end of open             % stack
             end
       end;
   return FAIL                                                         % no states left
end.
```
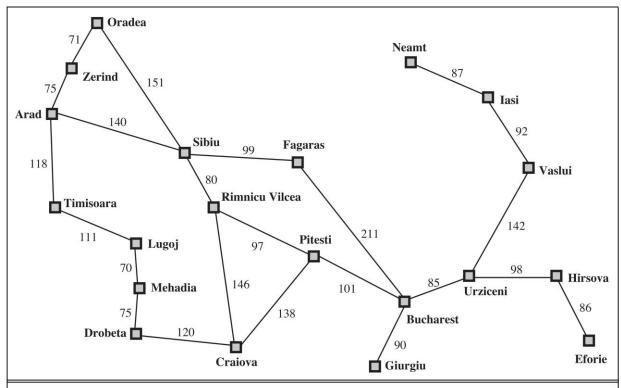
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Figure 3.2   A simplified road map of part of Romania.