```
import json
def main():
      runs the main loop
      calls a menu
      sends control to other parts of the program
      handles invalid input from menu
      menuChoice = getMenuChoice()
      if menuChoice == "0":
             exit
      if menuChoice == "1":
             loadGame()
      if menuChoice == "2":
             loadGame()
      if menuChoice == "3":
             saveGame()
      if menuChoice == "4":
             editNode()
      if menuChoice == "5":
             playGame()
      else:
             print(f"Invalid input.")
def getMenuChoice():
      print(f"""
             0) exit
             1) load default game
             2) load a game file
```

3) save the current file

```
4) edit or add a node
             5) play the current game
      menuChoice = input("What will you do? ")
      return menuChoice
def playGame():
      call getDefaultGame to get defaultGame
      set currentKey to "start"
      use while keepGoing to iterate through defaultGame dictionary
      set keepGoing to True
      while keepGoing:
             if currentKey gets "quit",
                    set keepGoing to False (exiting loop)
             else:
                    send game and currentKey to playNode function
                    currentKey gets result of playNode
def playNode():
      parameters: defaultGame, currentKey
      create var "currentNode"; "currentNode" looks up the node from the currentKey
      (defaultGame[currentKey])
      (description, menuA, nodeA, menuB, nodeB) = currentNode
      print the menu
      call {description}
                 1) {menuA}
                 2) {menuB}
      choice = input(what will you do?)
      if choice == "1":
```

```
nextKey == nodeA
       if choice == "2":
              nextKey == nodeB
       else:
              nextKey == currentKey
       return nextKey
def getDefaultGame():
       creates a single-node default game
       returns that data structure
       defaultGame = {
              "start": ["Do you want to win or lose?", "I'm a winner!", "win", "I'm a big
              loser", "lose"]
              "win": ["You win! I knew you could do it.", "Start over", "start", "Quit", "quit"]
              "lose": ["You lose! I'm so disappointed in you.", "Start over", "start", "Quit",
              "quit"]
       generates dictionary (defaultGame)
       return defaultGame
def editNode():
       given the current game structure,
       list all of the current content print(json.dumps(defaultGame, indent = 2))
       nodeName = get node name input("what node do you want to edit or create?")
              if node exists,
                     copy that node to newNode
              else (IE doesn't exist yet)
                     create newNode with empty data
```

use editField() to allow user to edit each node

```
return the now edited newNode
def editField():
      gets a field name
       print the field's current value
      if the user presses "enter" immediately without changing anything
             retain the current value
       else
             use the new value
def saveGame():
      save the game to a data file
       preset the file name
       print the current game dictionary in human-readable format (pretty-printing)
      save the file in JSON format
      defaultGame = getDefaultGame()
      outFile = open("defaultGame.json", "w")
      json.dump(defaultGame, outFile, indent=2)
       outFile.close
       print(json.dumps(defaultGame, indent=2))
       print("saved defaultGame data to defaultGame.json")
def loadGame():
       presume there is a data file named *whatever you preset it as in saveGame()*
       open that file
      load the data into the game object
       return that game object
      inFile = open("defaultGame.json", "r")
       defaultGame = json.load(inFile)
```

inFile.close

return defaultGame