**Task 7**

1. **BFS vs DFS in space?**

BFS (Breadth-First Search) generally has a higher space complexity than DFS (Depth-First Search) because BFS needs to store all the nodes at the current level before moving on to the next level. On the other hand, DFS only needs to store the nodes on the current path from the root to the current node. However, the space complexity of DFS can be higher than BFS in some cases, such as when the tree is very deep and the path to the solution is very long.

1. **programming languages allow inheritance?**

programming languages that support inheritance:

* Java
* C++
* Python
* Ruby
* PHP
* C#
* Swift
* Objective-C
* Kotlin
* Scala
* JavaScript (through prototypal inheritance)
* TypeScript

programming languages that do not support inheritance or have limited support for it:

* + Haskell (uses type classes instead)
  + ML (uses functors instead)
  + Erlang (does not have classes or inheritance)
  + Lisp (uses macros and CLOS instead)
  + Prolog (does not have classes or inheritance)
  + Smalltalk (uses mixins instead)
  + Assembly language (may use other techniques such as function pointers and jump tables)

1. **How can I hide the password in python?**

Can use function getpass()

import getpass

password = getpass.getpass(prompt="Enter your password: ")

print("Password entered:", password)