

The mentioned problem in subsequent pages can be attempted in your preferred programming language. The list is mentioned below.

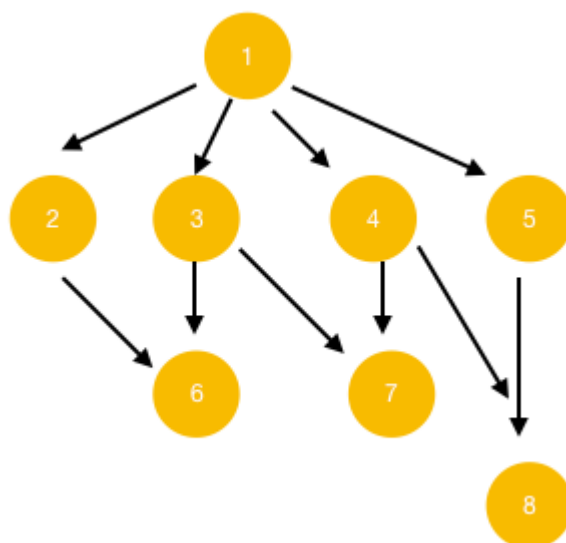
Repository	Commit your code at GIT / BITBUCKET etc as public repository.
Allowed language	C, C++, JAVA, SWIFT, OBJ-C, ANDROID, PYTHON

We encourage your to following coding principle

- Don't Repeat Yourself (DRY)
- Single responsibility principle
- Modular so create as many functions as you can.
- Flaunt your object oriented programming or functional programming understanding

## Question 1

You are given a DAG (Directed Acyclic Graph) which may be disjoint (this represents courses in a university that must be taken in a particular order, but may represent different streams). For each such graph, generate all possible paths that originate from a particular node. For example, in the following graph assume that all edges point downward



You should generate following path from "1"

- 1 -> 2 -> 6
- 1 -> 3 -> 7
- 1 -> 3 -> 6
- 1 -> 4 -> 7
- 1 -> 4 -> 8
- 1 -> 5 -> 8

For extra credit

- Add procedure to create the nodes & its linkage in a configurable way.