**Faculty of Computer & Information Sciences Ain Shams University**

Algorithms Design and Analysis Assignment (4)

**2nd Semester - 2022**

**IMPORTANT NOTES:**

1. Solve the two problems
2. They are about **Graphs**.
3. For the problem, after **coding and testing it**, make sure you **paste the ENTIRE CONTENT of "[CheckTree].cs"** file (**DON'T** paste the function only) in the following link:

<https://docs.google.com/forms/d/e/1FAIpQLSfk0L1NgXvo_MDpiQQOwUx9GPT-q6EzK4rcivqS6ituZzbTtQ/viewform>

1. **Due Dates: SAT 23-04-2022 @11:59 PM**

**Problems**

For each of the following problems:

1. Is It a [Tree](https://cisasuedu-my.sharepoint.com/personal/ghadahamed_cis_asu_edu_eg/Documents/%5bALG'22%5d%20Materials/Staff%20Only/%5b4%5d%20Assignments/ASM4/Is%20it%20a%20Tree/Is%20it%20a%20Tree.pdf) [[Startup](https://cisasuedu-my.sharepoint.com/personal/ghadahamed_cis_asu_edu_eg/Documents/%5bALG'22%5d%20Materials/Staff%20Only/%5b4%5d%20Assignments/ASM3/%5b2%5d%20Find%20the%20Root/FindTheRoot/FindTheRoot.sln) [Code](https://cisasuedu-my.sharepoint.com/personal/ghadahamed_cis_asu_edu_eg/Documents/%5bALG'22%5d%20Materials/Staff%20Only/%5b4%5d%20Assignments/ASM4/Is%20it%20a%20Tree/Is%20it%20a%20Tree/IsTree.sln)]

Complete the **missing function** in the given **template**

Make sure that you **test your code** successfully on the given **test cases** before submitting it.

**Deliverables: Paste the ENTIRE CONTENT of "[CheckTree].cs"** file (DON'T paste the function only) in the following link:

<https://docs.google.com/forms/d/e/1FAIpQLSfk0L1NgXvo_MDpiQQOwUx9GPT-q6EzK4rcivqS6ituZzbTtQ/viewform>

***Good Luck isA*** 

1