International Islamic University Chittagong

Course Code: CSE-3632

Course Title: Operating System Sessional

Submitted to:

Mr. Shaikh Shariful Habib

Assistant Professor

CSE,IIUC

Submitted By:

Name: Mahbubul Hasan

ID: C181029

Section: 6AM

Semester: 6th

Email:mahbubulhasan179@gmail.com

Phone:01812346095

Q. What are the differences between acyclic and tree directory structures?

<u>Ans:</u>

Acyclic graph directory:

- 1. An acyclic graph is a graph with no cycle and allows us to share subdirectories and files.
- 2. Searching is easy due to different-different paths.
- 3. We can share files.
- 4. We share the files via linking, in case deleting it may create the problem
- 5. If the link is a soft link then after deleting the file we left with a dangling pointer.
- 6. If any programmer makes some changes in the subdirectory it will reflect in both subdirectories.

Tree directory structures:

- **1.** A tree structure is the most common directory structure. The tree has a root directory, and every file in the system has a unique path.
- 2. Searching becomes very easy, we can use both absolute paths as well as relative.
- 3. We can not share files.
- 4.It is inefficient, because accessing a file may go under multiple directories.
- 5. Every file does not fit into the hierarchical model, files may be saved into multiple directories.
- 6. Very scalable, the probability of name collision is less.