

## Vidya Jyothi Institute of Technology

(Accredited by NAAC & NBA , Approved By A.I.C.T.E., New Delhi) permanently affliated JNTUH

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(AUTONOMOUS)

**Innovation in Teaching Learning: Role Play** 

**Subject:** Compiler Design

Name of the Faculty: M.VIJAYA

**Topic:** Phases of compiler

Class/ Section: III B.Tech II-Sem CSE-A

Teaching is an art and science. Teaching is a process of imparting knowledge and skills. It is a systematic process based on some educational objectives to communicate.

**Interactive learning** is a hands-on, real-world approach to education. 'Interactive learning actively engages the students in wrestling with the material. It reinvigorates the classroom for both students and faculty. Lectures are changed into discussions, and students and teachers become partners in the journey of knowledge acquisition.'

**Role-playing** is the changing of one's behaviour to assume a <u>role</u>, either unconsciously to fill a social role, or consciously to act out an adopted role.

- To refer to the playing of roles generally such as in a theatre, or educational setting;
- To refer to taking a role of an existing character or person and acting it out with a partner taking someone else's role, often involving different genres of practice

## **Topic: Phases of compiler**

<u>Compiler:</u> A compiler is a <u>computer program</u> that transforms computer code written in one <u>programming language</u> (the source language) into another programming language (the target language).

**Lexical Analysis**. The first phase of scanner works as a text scanner

**Syntax Analysis**. The next phase is called the syntax analysis or parsing

**Semantic Analysis.** Semantic analysis checks whether the parse tree constructed follows the rules of language. For example, assignment of values is between compatible data types, and adding string to an integer. ...

**Intermediate Code Generation** After semantic analysis the compiler generates an intermediate code of the source code for the target machine. It represents a program for some abstract machine.

**Code Optimization** The next phase does code optimization of the intermediate code.

**Code Generation** In this phase, the code generator takes the optimized representation of the intermediate code and maps it to the target machine language.

