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WEEK 1 Lecture 1.

Q-1 What are the features of Object Oriented Languages?

Ans There are three major features in Object-Oriented programming that makes them different than non-OOP languages. This includes encapsulation, inheritance and polymorphism.

Encapsulation Enforces Modularity:

Encapsulation refers to the creation of self-contained modules that bind processing functions to the data. These user de defined data-types are called "classes" and one instance of a class is an object.

Polymorphosim Takes any Shape:

Object-Oriented Programming allows procedures about objects to be created whose ~~extract~~ exact type is not known until run-time. It also allows ~~he~~ new shapes to be easily integrated.

OBJECT-ORIENTED PROGRAMMING LANGUAGES:

In the 1970's XeroX's small talk was the first object-oriented Programming language which was used to create the graphical user interface. Today, C++, C#, Java, JavaScript, Visual Basic .NET and Python are ~~object~~ popular object-

~~orient~~ oriented language.

Q-2 What are the features of structural ~~langu~~ languages?

Ans Most of the programming languages uses structure programming language features such as ALGOL, PASCAL, PL/I, Ada, C etc. The structure Programming enforces a logical structure to the program being written to make it more efficient and easy to modify and understand. Structured Programming (sometimes known as modular Programming) is a subset of procedural programming languages that enforces a logical ~~stru~~ structure on the program ~~bein~~ being written to make it more efficient and easier to understand and modify. Certain languages such as Ada, PASCAL and ~~b~~ ~~dBase~~ dBASE are designed with features or enforce a logical program structure.

Q-3 What are the features of procedural languages?

Structural language is ~~aimed at~~ a programming ~~parad~~ paradigm aimed at improving clarity and quality. It improves development time of

a computer program by making extensive use of structured ~~contr~~ control flow of selection and repetition.

Q-3 What are the features of procedural languages?

Ans Procedural Programming is good for General purpose Programming. It provides coded simplicity along with ease of implementation of ~~compilers~~ compiles and interpreters. By Procedural language code can be reused in different parts of Program without copying it by procedures call or functions. The Program flow can be tracked easily.

Some of the features of computer Procedural languages are: Predefined functions, ~~local~~ local variables, global variables, Parameter passing, modularity, Procedures, Programming libraries and procedural programming paradigm..

Programming languages based ~~on~~ built for procedural programming put emphasis on flow control structures. Procedural Programming is a ~~pa~~ programming paradigm derived from structured programming based on the concept of procedure call. Procedures also known as ~~routines~~ routines, subroutines or functions simply contains a series of computational steps to be carried out.

Q.4 Illustrate the difference between Assembler and compiler.

	ASSEMBLER	COMPILER
1-	Assembler is a computer program that takes the assembly code generated by the compiler and translates it into the machine code.	The Job of the compiler is to take the pre-processed ~~code~~ source code and translates it into the assembly code.
2-	Assembler inputs the assembly language code.	Compiler inputs the source code. ~~The~~
3-	The output of assembler is a binary code.	The output of the compiler is a mnemonic version of the code.
4-	Phases of assembler are the first phase and the second phase.	Phases of the compiler are ~~the~~ a lexical analyzer, syntax analyzer, a code optimizer, symbol table and error handler.
5-	The Assembler is used to translate the ~~progr~~ Program written in Assembly language into machine code.	The language processor that reads the complete source program written in High level language and translates into an equivalent program in machine language is called as compiler.