Characteristics of Procedure Oriented.

FY.BSc.IT – SEM II

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CHARACTERISTICS OF PROCEDURE ORIENTED.

- a. Follow top-down approach.
- b. Data is given less importance than function.
- c. Vulnerability of data is there as functions share global data.
- d. Functions manipulate global data, without letting other function to know.
- e. Big program is divided into small modules.
- f. Algorithms are designed first without bothering about minute details.

A. FOLLOW TOP-DOWN APPROACH.

- In this approach, a large program **divides into small programs**, and these programs are known as **modules**.
- The basic task of a top-down approach is to **divide the problem into tasks** and then **divide tasks into smaller sub-tasks** and so on.
- In this approach, first we **develop the main module** and then the **next level modules** are developed. This procedure is continued **till all the modules are developed**.

B. DATA IS GIVEN LESS IMPORTANCE THAN FUNCTION.

- A function is a block of code which only runs when it is called.
- You can pass data, known as parameters, into a function.
- Functions are used to perform certain actions, and they are important for reusing code: Define the code once, and use it many times.

C. VULNERABILITY OF DATA IS THERE AS FUNCTIONS SHARE GLOBAL DATA.

- A major goal of the software development process is to deliver high quality and secure products on time.
- When we declare data globally then there is a risk of the data being easily accessible, this leads to vulnerability.
- The quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally.

D. FUNCTIONS MANIPULATE GLOBAL DATA, WITHOUT LETTING OTHER FUNCTION TO KNOW.

- In C and C++, as long as a global variable is not declared as constant then it can be changed anywhere.
- This is why global variables are dangerous.
- If a global variable is used in a function it changes the data/value inside the function.

E. BIG PROGRAM IS DIVIDED INTO SMALL MODULES

- If you ever wanted to write a large program or software, the most common rookie mistake is to jump in directly and try to write all the necessary code into a single program and later try to debug or extend later.
- This kind of approach is doomed to fail and would usually require re-writing from scratch. So in order to tackle this scenario, we can try to divide the problem into multiple subproblems and then try to tackle it one by one.

F. ALGORITHMS ARE DESIGNED FIRST WITHOUT BOTHERING ABOUT MINUTE DETAILS.

- An Algorithm is a procedure to solve a particular problem in a finite number of steps for a finite-sized input.
- The Algorithm designed are language-independent, i.e. they are just plain instructions that can be implemented in any language, and yet the output will be the same, as expected.
- Minute details are not taken into consideration as it is a logical and sequential structure of a program without involvement of any programming language.

THE END

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