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Shakti Utthan Ashram, Lakhisarai – 811311 (Bihar)

Chapter:- 4. PROGRAMMING AND BASICS .

CLASS- IXTH

SUB TEACHER :- VIKASH KR. RAJAK

SUBJECT:- IT

DATE :- 04/06/2020

 **Topic :- Program Development Process.**

➤ **PROGRAM DEVELOPMENT PROCESS:-**

In order to develop a computer program, a programmer has to go through the following stages:-

1. **DEFINING AND ANALYSING THE PROBLEM:-**

In this step a programmer studies the problem and decides how the problem will be best solved. Studying a problem is necessary because it helps a programmer to decide about:

- The facts and figures to be collected.
- The way in which the program will be designed.
- The language in which the program will be most suitable.
- What is the desired output and in which form it is needed, etc.

2. **DESIGNING THE ALGORITHM:-**

An algorithm is a set of instructions or sequence of steps that must be carried out before a programmer starts preparing his program. The programmer designs an algorithm to help visualize possible alternatives in a program.

3. **FLOWCHARTING:-**

A flow chart is a graphical representation of a program which helps a programmer to decide on various data processing procedures with the help of labeled geometrical diagrams. A flow chart is mainly used to describe the complete data processing system including the hardware devices and media used. It is very necessary for a programmer to know about the available devices before developing a program

4. **CODING OR WRITING THE PROGRAM:-**

The next job after analysing the problem is to write the program in a high-level language, usually called coding. This is achieved by translating the flow chart in an appropriate high-level language, of course according to the syntax rules of the language.

5. **TEST EXECUTION:-**

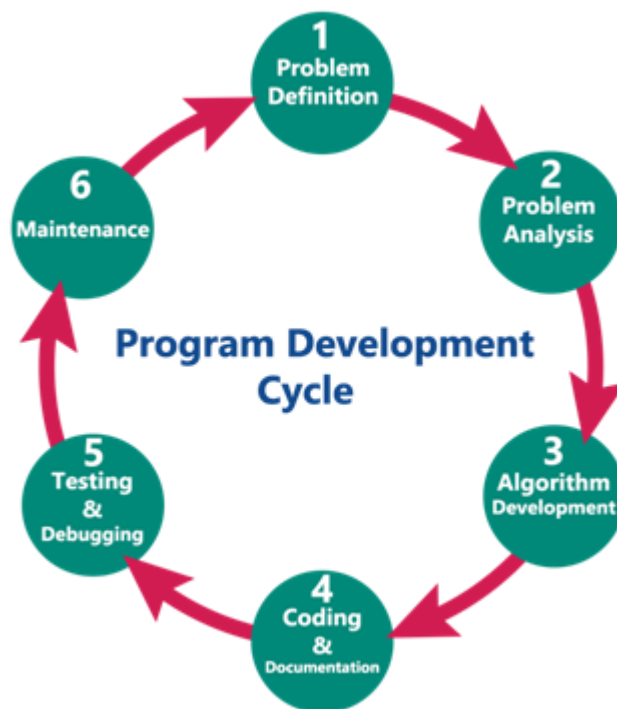
The process of execution of any program to find out for errors or bugs (mistakes) is called test execution. This is very important because it helps a programmer to check the logic of the program and to ensure that the program is error-free and workable.

6. **DEBUGGING:-**

It is a term which is used extensively in programming. Debugging is the process of detecting, locating and correcting the bugs by running the programs again and again.

7. **FINAL DOCUMENTATION:-**

It is written information about any computer software. Final document guides the user about how to use the program in the most efficient way.



✍ Home Work (Based on study material of 03-06-20)

Answer the following questions:-

1. Write is Low Level Language?
2. What is High Level Language?
3. What is Compiler Language?
4. What is Intrepreter?