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Subject Introduction to Computing & Programing

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Ans 1,a

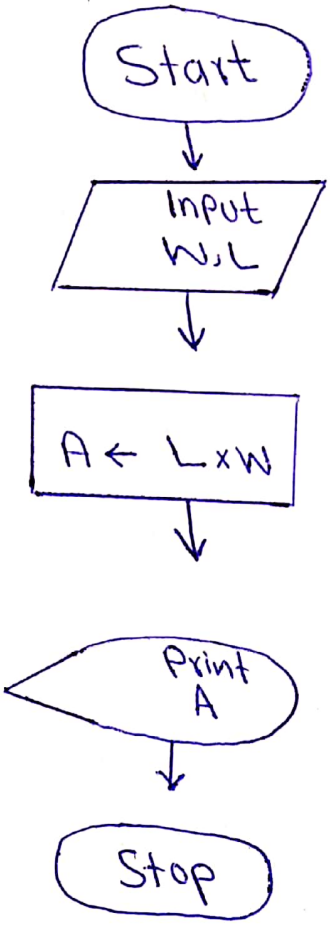
Algorithm:

Step 1: Input W, L,

Step 2: A ☐ L x W,

Step 3: Print A.

Flowchart



Ans 1(b)

Following are the errors which occur during the execution of a program.

Syntax Errors:-

This error occur when the rule of programs are violated.

Semantics Error:-

This error occur when statement has no meaning.

Type Error:-

This error occur when data/value of unexpected type is passed or input.

Run time Error:-

This error occur during the execution of some illegal operation or unavailability of conditions for executing.

Logical Error

This error which causes a program to produce incorrect or undesired output.

Ans (2) (a)

Both iostream.h and Conio.h are Called Preprocessor Statement.

#Include<iostream.h> is Used in C++ in order to Include the header file "iostream" in the program

Iostream.h is Used to Invoke Commonly used function

For example

(i) Cout (ii) Cin in C++ iostream Stands for input. output stream.

#Include<conio.h> is Used in both C & C++. It is Used to Include header file "Conio" in a Program

It is Used to invoke function related to the output of the program.

For Example

(i) clrscr();

(ii) getch();

Conio stand for Console input.

Ans (2) (b)

Maintain and update the program

Maintain and update are the modification of a Software product after delivery to Correct fault, to improve performance and other attributes

☞ Maintain mean removing fault from the programe.

☞ Update mean adding additional things in the program.

Ans 3 (i)

Bug:-

A bug is a Coding error in a Computer Program.

Debug:-

The Process of finding bugs before Program Users do is called debugging.

(11)

Syntax Error

Syntax error are mistakes such as misspelled keywords, a missing closing Parenthesis or missing character, brackets.

- All famous IDEs such as Eclipse, Net beans & visual Studio detech these errors.

Logic Error

Logic Errors are those errors that Prevent program from doing what you expected it to do.

- With logic errors you get no warning at all

These are the most difficult error to detect.

(vi)

Compiler

- Compiler translates high level programming language Code to machine level Code
- Source Code in high level programming language.
- Compiler checks & Convert the Complete code at one time
- Mnemonic version of machine Code

Examples

C, C++, java Compilers

Assembler

- Assembler Convert the assembly level languages to machine level code.
- Assembly level Code as input
- Assembler generally does not Convert Complete Code at one time.
- Binary version of machine Code.

Examples

GAS, GNU assembler.

(iv)

System Software	Application Software
• Computer Software designed to provide a platform to other Software	• Software provide / designed to perform a group of coordinated functions, tasks or activities.
• Manage resources & help to run hardware & application Software	• Perform a specific task according to their type.
• Runs when the system starts & runs till the end	• Runs when the User required.
• Devoloped using languages like C, C++, Assembly	• Devolped using langu java, C, C++, visu Basic
• Essiential for the proper functioning of a system	Not extreamly important for the functioning of the system.

(v)

High Level Language	Low Level Language
• High level language are easy to learn.	• Low level language are difficult to learn.
• High level language are near to human languages.	• Low level languages are far from human language.
• Translator is required.	• No need of translator
• Program in high level language are slow in execution.	• Program in low level language are fast in execution.
• Program in high level languages are easy to modify	• Program in low level language are difficult to modify.