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* Assignment 3 *

Title:-

Creating a class which uses the concept of inheritance display data and data member and uses the concept of exception handling.

problem Statement:-

Imagine a publishing company which does marketing for book and audio. Create a class publication that stores the title, price of publication from this class derive two classes books which adds a page count and type which add a playing time in minutes. write a program that indicates the book and type class allows user to enter data and display the data member. If an exception is caught, replace all the data member value with zero values.

prerequisites:- object oriented programming.

objectives:- To learn the concept of inheritance and exception handling.

Theory:-

Inheritance:- Inheritance in oop can be described as a process of creating new classes for existing classes. An existing class that is "parent" a new class is called as base class.

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Syntax:-

class Derived class:: access specifier,
Base class.

There are three access specifiers.

Namely public, private and protected.

Type of inheritance:-

① Single Inheritance.

② Multiple Inheritance.

③ Hierarchical Inheritance.

④ Multilevel inheritance

⑤ Hybrid Inheritance.

Exception Handling:-

Exception Handling is a part of C++ and object oriented programming. They are added in C++ to handle the unwanted situation during program execution. If we do not type the program correctly then, at night result in error. Main purpose of exception handling is to identify and report the runtime error in the program.

eg:- divide by zero, array index out of bound error, file not found, device not found etc.

Facilities:- Linux operating system, G++.

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Algorithm:-

Step 1: Start

Step 2: Create class publication, book and tape

Step 3: publication class having data member title, price.

Step 4: class book having data member page and member function getdata() and putdata().

Step 5: class Tape having data member minutes and member function getdata() and putdata().

Step 6: Create an object of class book and object of class tape.

Step 7: Stop.

Conclusion:- Hence we have successfully studied concept of inheritance and exception Handling.