Assignment 4

QUES1. Discuss the ways using suitable examples in which inheritance promotes software reuse, saves time during program development and helps prevent errors?

ANS. Inheritance allows developers to create derived classes that reuse code declared already in base class. Avoiding the duplication of common functionality between several classes by building an inheritance hierarchy to contain the classes can save developers time. Similarly ,placing common functionality in a single base class, rather than duplicating the code in multiple unrelated classes, helps prevent the same errors from appearing in multiple source code files, so at this particular time we use inheritance

Example code:

#include

using namespace std;

class Parents {

public:

void Baseclass () {

cout << " hey you are in base class " << "\n"; } };

Class child: public Parents {

public:

void Derivedclass () {

cout << "hey you are in derived class!" << "\n"; } };

int main()

{

Child C1;

C1. Baseclass ();

C1. Derivedclass ();

}