** RIPHAH INTERNATIONAL UNIVERSITY LAHORE**

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PROGRAM & SEM: **BSCS 2A**

OOP LAB TASK 5 MAY REPORT

**TASK 1**

**CREATION OF HEADER FILE:**

**TASK1.H**

#include<iostream>

using std::cout;

using std::endl;

class Base{

public:

void testFunction ();

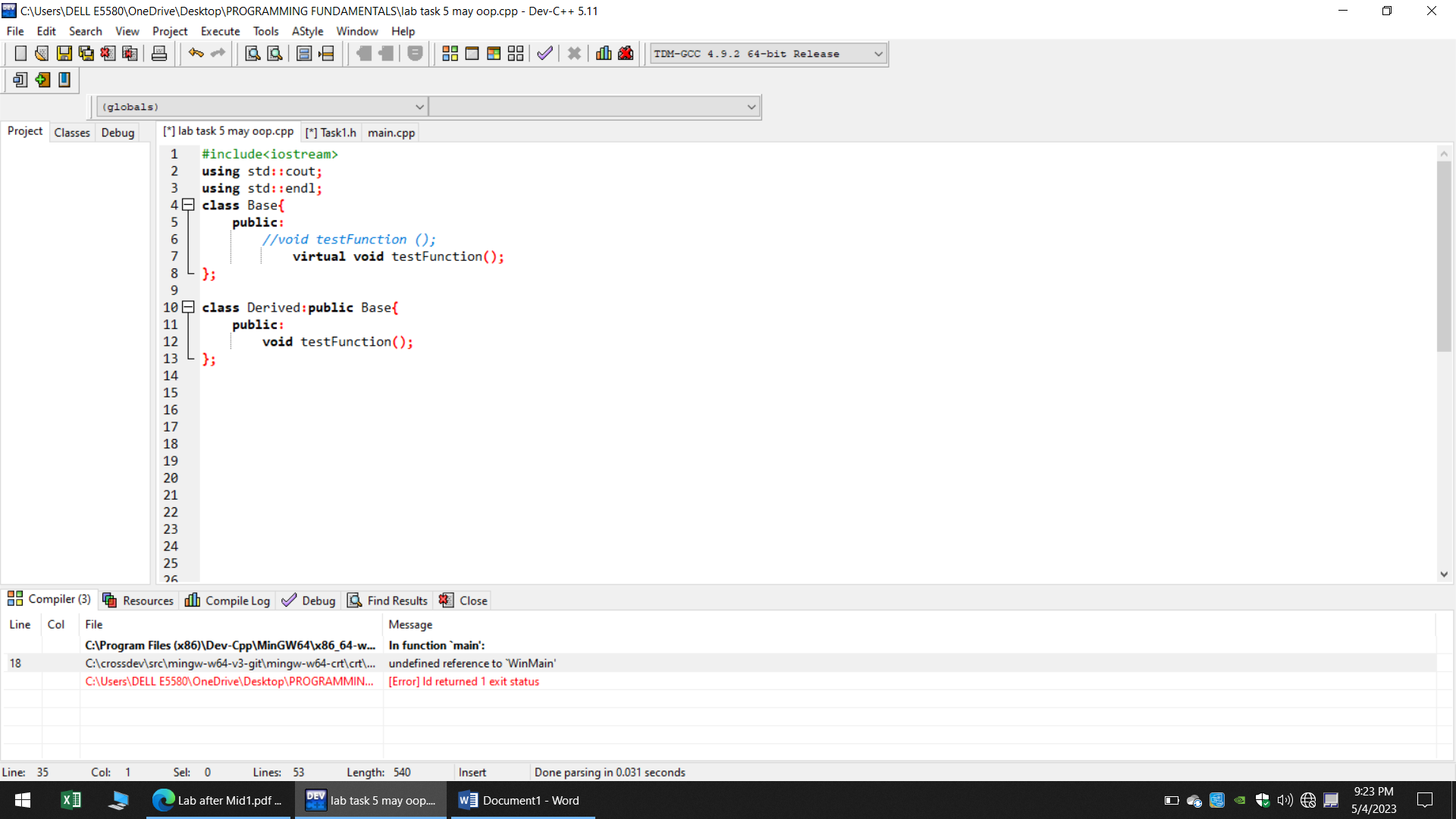
};

class Derived:public Base{

public:

void testFunction();

};



#include"Task1.h"

void Base::test Function()

{

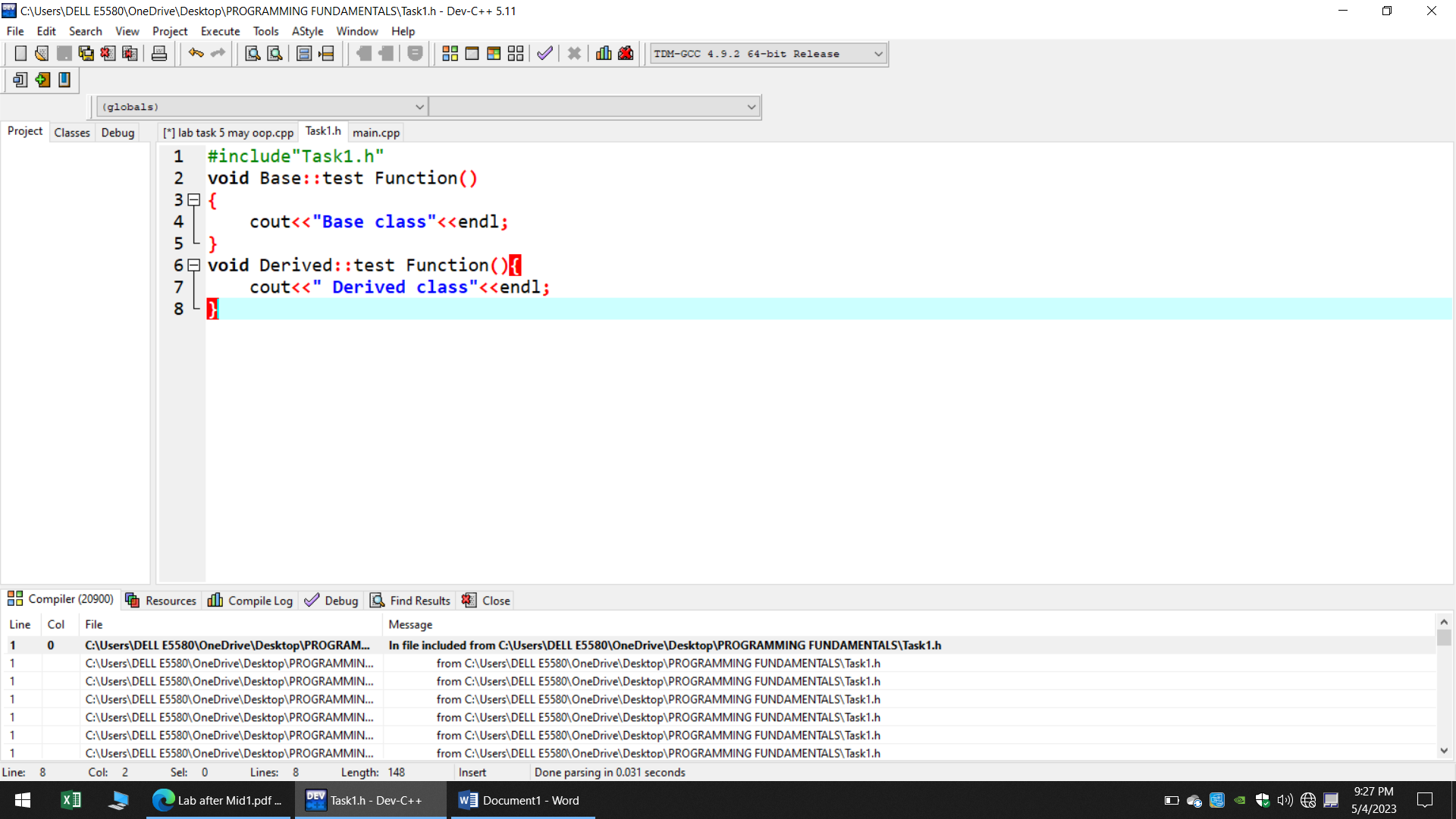
cout<<"Base class"<<endl;

}

void Derived::test Function(){

cout<<" Derived class"<<endl;

}



**TASK 1.CPP:**

#include"Task1.h"

int main (void)

{

Base\*ptr= new Base;

ptr-> testFunction();

delete ptr;

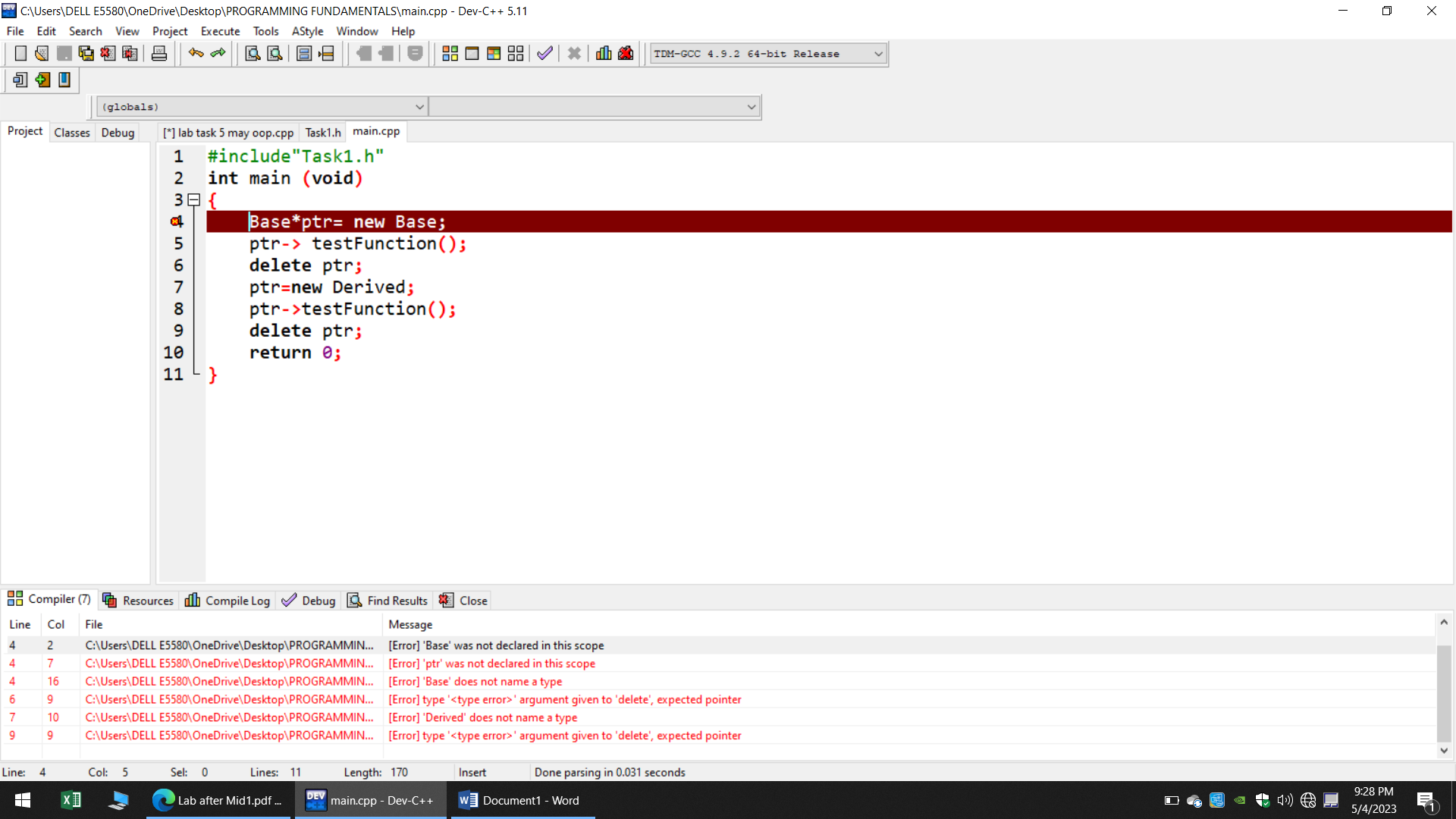
ptr=new Derived;

ptr->testFunction();

delete ptr;

return 0;

}



**CREATION OF MAIN BODY:**

#include<iostream>

using std::cout;

using std::endl;

class Base{

public:

**Addition of virtual function**

virtual void testFunction();

};

class Derived:public Base{

public:

void testFunction();

};

int main (void)

{

Base\*ptr= new Base;

ptr-> testFunction();

delete ptr;

ptr=new Derived;

ptr->testFunction();

delete ptr;

return 0;

}

void Base::testFunction()

{

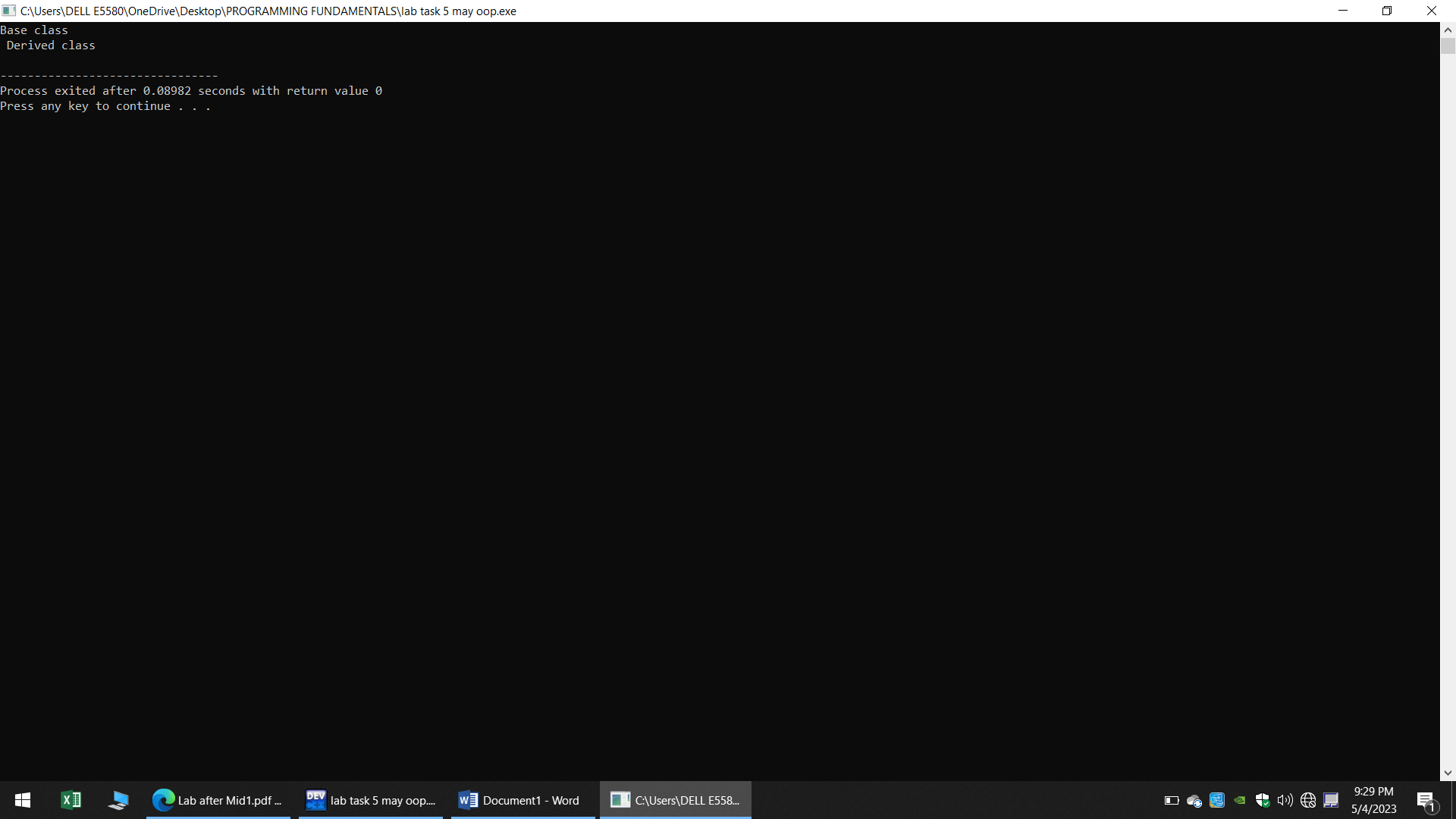
cout<<"Base class"<<endl;

}

void Derived::testFunction(){

cout<<" Derived class"<<endl;

}



**When I compiled all code together it shows output such that given in the picture**

Base class

Derived class

**TASK 2**

#include <iostream >

using namespace std;

class Mammal {

public:

Mammal(void );

~Mammal(void );

void Move() const;

void Speak() const;

protected :

int itsAge ;

};

class Dog :public Mammal{

public:

virtual void Move() const;

virtual void Speak() const;

};

Mammal::Mammal(void):itsAge(1)

{

cout<<"Mammal constructor..."<<endl;

}

Mammal ::~Mammal(void)

{

cout <<"Mammal destructor ..."<<endl;

}

void Mammal ::Move ()const

{

cout<<"Mammal moves a step! "<<endl;

}

void Mammal ::Speak ()const

{

cout <<"What does a mammal speak ? Mammilian!"<<endl;

}

// Dog

void Dog ::Move ()const

{

cout<<"Dog moves a step! "<<endl;

}

void Dog ::Speak ()const

{

cout <<"What does a Dog speak ? bhao!"<<endl;

}

int main ()

{

Mammal \*pDog=new Dog;

pDog -> Move ();

pDog->Speak();

Dog \*pDog2 =new Dog;

pDog2->Move ();

pDog2->Speak();

return 0 ;

}

**OUTPUT:**

