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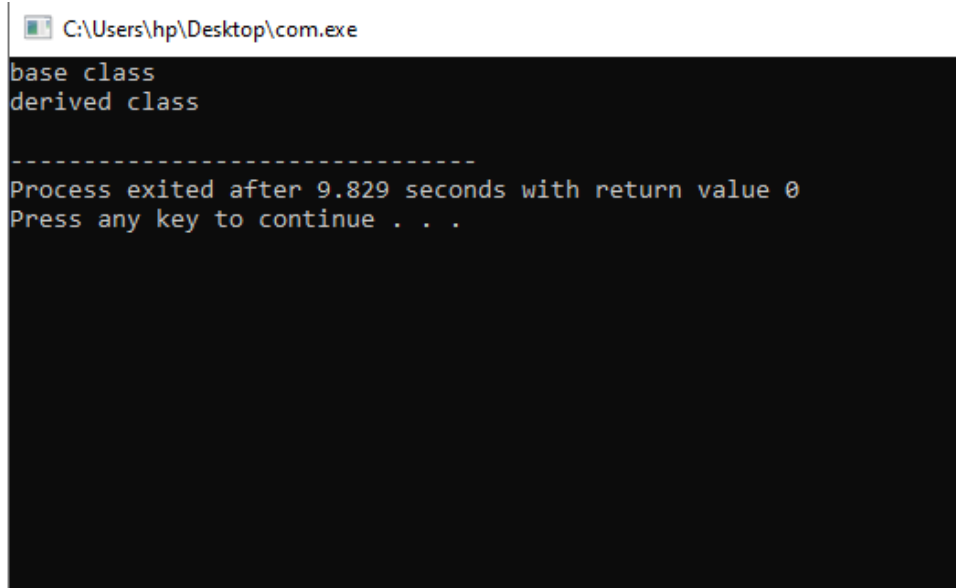
## OOP\_LABTASK-AFTER MIDS

### Task 1.

```
task1.h  task1.cpp  main.cpp  com.cpp  mammal1,h.cpp  mammal1.cpp  comp2.cpp

1  #include<iostream>
2  using std::cout;
3  using std::endl;
4  class base{
5      public:
6          virtual void testfunction();
7  };
8  class derived : public base{
9      public:
10         void testfunction();
11 };
12 void base::testfunction(){
13     cout<<"base class"<<endl;
14 }
15 void derived::testfunction(){
16     cout<<"derived class"<<endl;
17 }
18 int main(void){
19     base*ptr = new base;
20     ptr->testfunction();
21     delete ptr;
22     ptr = new derived;
23     ptr -> testfunction();
24     delete ptr;
25     return 0;
26 }
```

## OUTPUT

A screenshot of a Windows command prompt window. The title bar at the top shows the file path "C:\Users\hp\Desktop\com.exe". The command prompt area has a black background with white text. The text displayed is: "base class", "derived class", a line of dashes "-----", "Process exited after 9.829 seconds with return value 0", and "Press any key to continue . . .".

```
C:\Users\hp\Desktop\com.exe  
base class  
derived class  
-----  
Process exited after 9.829 seconds with return value 0  
Press any key to continue . . .
```

## Changing:

We have used virtual function for polymorphism

## TASK 2

```

1  #pragma once
2  #include<iostream>
3  using std::cout;
4  using std::endl;
5  class mammal{
6  public:
7      mammal(void);
8      ~mammal(void);
9      virtual void move() const;
10     virtual void speak()const;
11     protected:
12         int itsage;
13 };
14 class Dog:public mammal{
15 };
16 mammal::mammal(void):itsage(1){
17     cout<<"mammal constructor..."<<endl;
18 }
19 mammal::~~mammal(void){
20     cout<<"mammal destructor..."<<endl;
21 }
22 void mammal::move()const{
23     cout<<"mammal moves a step!"<<endl;
24 }
25 void mammal::speak()const{
26     cout<<"what does a mammal speak? mammilian!"<<endl;
27 }
28
29 int main()
30 {
31     mammal *pDog = new Dog;
32     pDog->move();
33     pDog->speak();
34     return 0;
35 }
36

```

## OUTPUT

C:\Users\hp\Desktop\comp2.exe

mammal constructor...

mammal moves a step!

what does a mammal speak? mammilian!

-----

Process exited after 10.36 seconds with return value 0

Press any key to continue . . .