IT 1461 – OOP WITH C++ LABORATORY LAB

/*

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Program:

a) C++ program to illustrate function overriding concept in inheritance.

Code:

```
#include <bits/stdc++.h>
using namespace std;

class base{
 public:
    void getdata(){
      cout<<"This is parent class"<<endl;

    }
};
class derived : public base{
  public:
     void getdata(){

     cout<<"This is derived class "<<endl;  //here it overrides the
getdata() of base class;
     }

  } ;


int main() {
  derived b;
```

```
  b.getdata(); // method of class derived invokes , instead of class base;
  b.base :: getdata();

    return 0;
}
```

b) C++ program to illustrate the ambiguity resolution using virtual inheritance.

Code:

```
#include <bits/stdc++.h>
using namespace std;

class A {

public:
   int var1;


};

class B: virtual public A {

public:
   int var2;


};

class C: virtual public A{

public:
   int var3;


};
class D: public B, public C {

public:
   int sum;


};
```

```
int main() {
   D obj;
   obj.var2=1;
   obj.var3=2;
   obj.var1=3;
   obj.sum= obj.var1 + obj.var2 + obj.var3;
   cout<<"Sum is  : "<<obj.sum;
    return 0;
}
```