Practical-7.(a)

Aim: Write a C++ program illustrating the use of virtual functions in class.

Algorithm:(i)Start

(ii)class Base

(iii)Main function

(iv)Print the result

(v)Stop

Theory: A virtual function is a member function in the base class that we expect to redefine in derived classes.

Program:

```
#include <iostream>
class Base
{
   public:
   void display()
   {
      std::cout<<"\nDisplay Base";
   }
   virtual void show()
   {
```

```
        std::cout<<"\nShow Base";
    }
};
class Derived:public Base
{
    public:
    void display()
    {
        std::cout<<"\nDisplay Derived";
    }
    void show()
    {
        std::cout<<"\nShow Derived";
    }
};
int main()
{
    std::cout<<"08_Rabin Nadar";
    Base B;
    Derived D;
    Base*bptr;
```

```
    std::cout<<"\nbptr points to Base\n";
    bptr=&B;
    bptr->display();
    bptr->show();
    std::cout<<"\n\nbptr points to derived\n";
    bptr =&D;
    bptr->display();
    bptr->show();
    return 0;
}
```

Output:

```
Output
/tmp/ESZr5lqfGf.o
08_Rabin Nadar
bptr points to Base

Display Base
Show Base

bptr points to derived

Display Base
Show Derived
```

Conclusion: We have successfully written the code and executed it.