P4)

#include<iostream>

using namespace std;

class animal

{

public:

string name;

string type;

void setAnimal()

{

cout<<"Enter the name of the animal\n";

cin>>name;

cout<<"Enter the type of animal\n";

cin>>type;

}

virtual void eat()

{

cout<<name<<" eates food \n"<<endl;

}

virtual void speak()

{

cout<<name<<" makes a sound"<<endl;

}

};

class cat:public animal

{

public:

void speak()

{

cout<<name<<" says 'meow' "<<endl;

}

void eat()

{

cout<<name<<" eats cat food "<<endl;

}

};

class dog:public animal

{

public:

void speak()

{

cout<<name<<" says 'woof' "<<endl;

}

void eat()

{

cout<<name<<" eats dog food "<<endl;

}

};

int main()

{

animal \*aptr;

cat c1;

dog d1;

c1.setAnimal();

d1.setAnimal();

aptr=&c1;

aptr->eat();

aptr->speak();

aptr=&d1;

aptr->eat();

aptr->speak();

return 0;

}

OUTPUT:

