

Institute of Computer Technology
B. Tech Computer Science and Engineering
Subject: ESFP-II (2CSE203)

PRACTICAL-EXAM

AIM: - Implement a program to override legs function in classes Animal, Bird, Reptile and display two legs if function of bird is called, display four legs if reptile is called but if the reptile is crawler then four legs but if it is creeper then display no legs.

1) Animal Type Bird -> Birds have two legs

2) Animal Type Reptile Crawler-> Crawlers have 4 legs like lizards

Creeper-> Creepers have no legs as snakes

CODE:

```
#include <iostream>
using namespace std;
class Animal
{
    public:
    void legs()
    {
        cout<<"\nInside Animal class";
    }
};
class Bird: public Animal
{
    public:
    void legs()
    {
        cout<<"\nBirds have two legs"<<endl;
    }
};
class Reptile: public Animal{
    public:
    void legs(int a)
    {
        if (a==1)
        {
            cout<<"\nCrawler have 4 legs like lizards"<<endl;
        }
        else
```

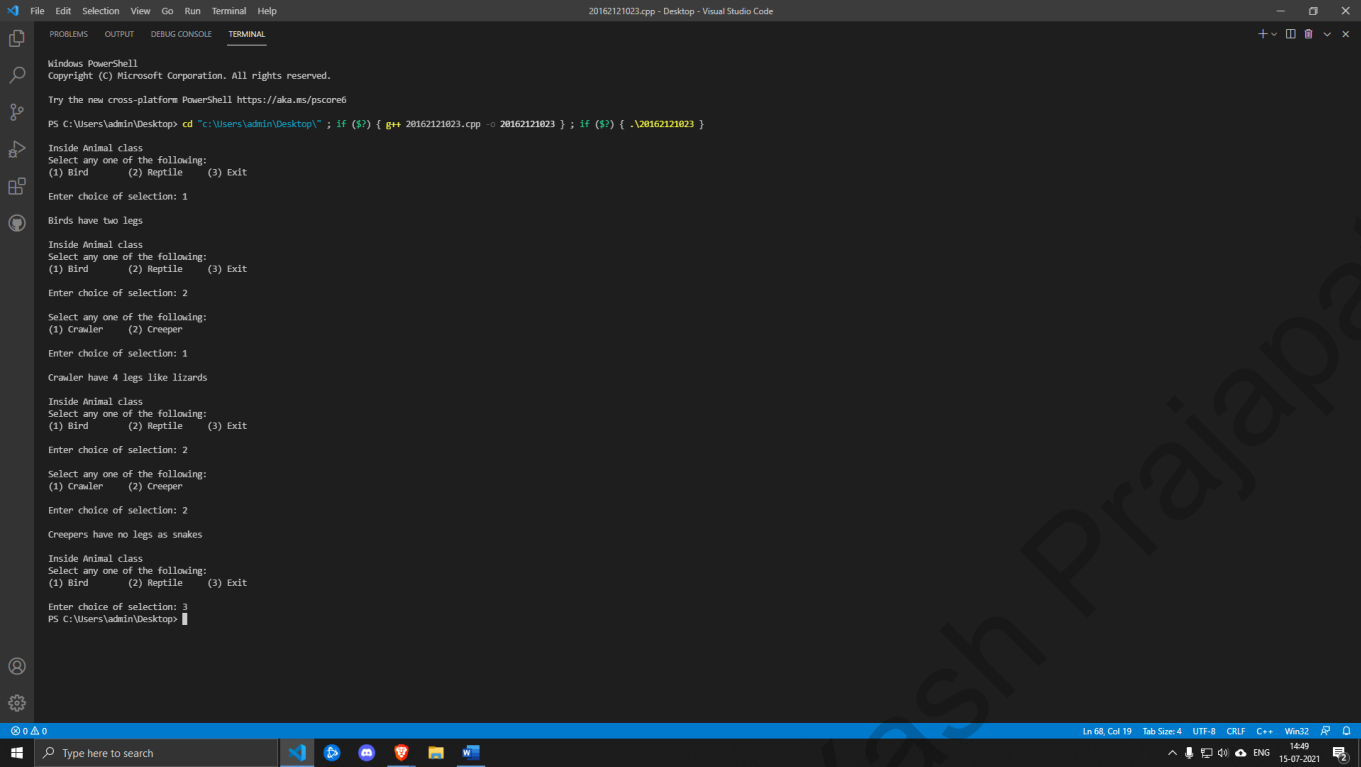
```
        {
            cout<<"\nCreepers have no legs as snakes"<<endl;
        }
    }
};

int main()
{
    while(1)
    {
        int a,c;
        Animal ob;
        ob.legs();
        cout<<"\nSelect any one of the following: ";
        cout<<"\n(1) Bird\t(2) Reptile\t(3) Exit"<<endl;
        cout<<"\nEnter choice of selection: ";
        cin>>c;
        switch (c)
        {
            case 1:
                Bird obj;
                obj.legs();
                break;

            case 2:
                Reptile obj1;
                cout<<"\nSelect any one of the following: ";
                cout<<"\n(1) Crawler\t(2) Creeper"<<endl;
                cout<<"\nEnter choice of selection: ";
                cin>>a;
                obj1.legs(a);
                break;

            case 3:
                exit(0);
            default:
                break;
        }
    }
    return 0;
}
```

OUTPUT:



```
File Edit Selection View Go Run Terminal Help
20162121023.cpp - Desktop - Visual Studio Code

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\admin\Desktop> cd "C:\Users\admin\Desktop\" ; if ($?) { g++ 20162121023.cpp -o 20162121023 } ; if ($?) { .\20162121023 }

Inside Animal class
Select any one of the following:
(1) Bird (2) Reptile (3) Exit

Enter choice of selection: 1

Birds have two legs

Inside Animal class
Select any one of the following:
(1) Bird (2) Reptile (3) Exit

Enter choice of selection: 2

Select any one of the following:
(1) Crawler (2) Creeper

Enter choice of selection: 1

Crawler have 4 legs like lizards

Inside Animal class
Select any one of the following:
(1) Bird (2) Reptile (3) Exit

Enter choice of selection: 2

Select any one of the following:
(1) Crawler (2) Creeper

Enter choice of selection: 2

Creeper have no legs as snakes

Inside Animal class
Select any one of the following:
(1) Bird (2) Reptile (3) Exit

Enter choice of selection: 3
PS C:\Users\admin\Desktop>
```