AIM: Demonstrate the concept of user defined Package using following scenario: Create a new project in which create a package named org.animals. In that create various classes like: Lion, Monkey and Elephant.

In each class create data members like color, weight and age. Create methods like is Vegetarian, canClimb, getSound.

Create another project and in that create a package called zoo and create a class called VandalurZoo and create objects for the animals that are existing in zoo and print the characteristic of each animal.

Lion.java

```java
Lion.java x
//Create a new project in which create a package named animals.
//In that create various classes like Lion, Monkey, Elephant.
//In each class create data members like color, weight and age & Create methods like isVegetarian, canClimb, getSound.

//Lion class
package animalspack;
public class Lion
{
    private String color;
    private float weight;
    private int age;
    public Lion(String color, float weight, int age)
    {
        this.color=color;
        this.weight=weight;
        this.age=age;
        System.out.println("Lion: color, weight and age is: "+color+" "+weight+" and "+age);
    }
    public boolean isVegetarian()
    {
        return false;
    }
    public boolean canClimb()
    {
        return false;
    }
    public String getSound()
    {
        return "roaring";
    }

}
//---------------------------------------------------------------------------------------------
```

Elephant.java

```java
Elephant.java x
//Elephant class
package animalspack;
public class Elephant
{
    private String color;
    private float weight;
    private int age;
    public Elephant(String color, float weight, int age)
    {
        this.color=color;
        this.weight=weight;
        this.age=age;
        System.out.println("Elephant color, weight and age is: "+color+" "+weight+" and "+age);
    }
    public boolean isVegetarian()
    {
        return true;
    }
    public boolean canClimb()
    {
        return false;
    }
    public String getSound()
    {
        return "trumpeting";
    }
}
//=============================================================================================
```
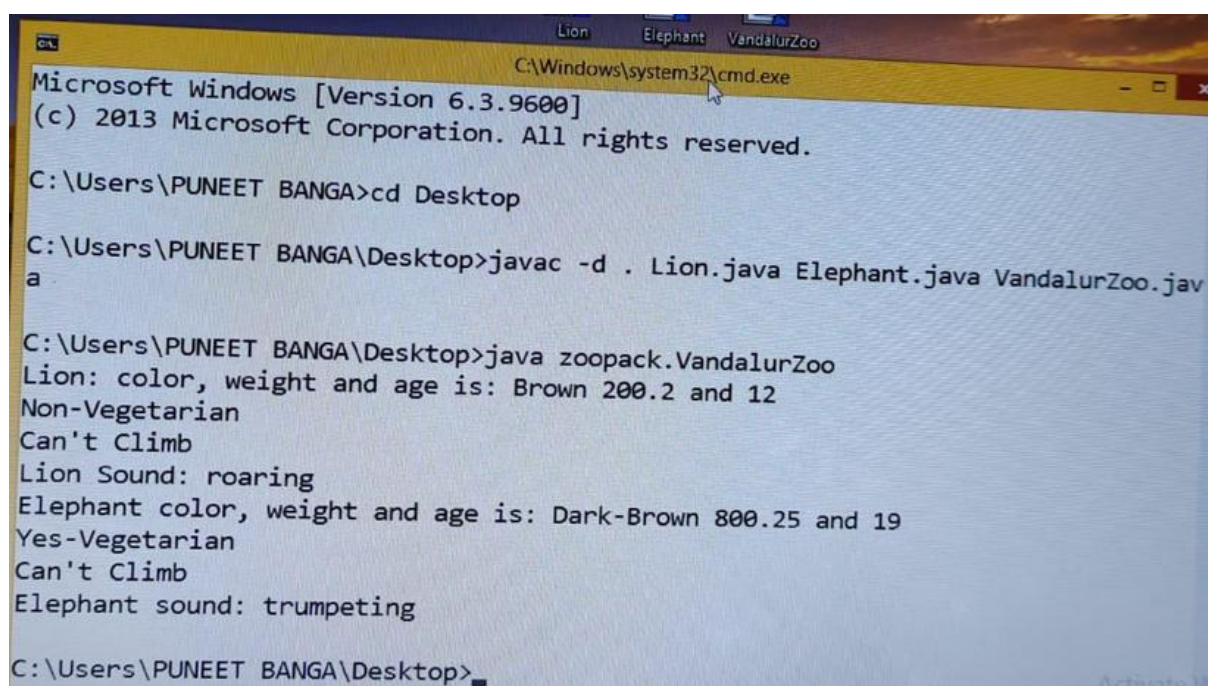
VandalurZoo.java

```java
/*Create a package called zoo and create a class called VandalurZoo and
create objects for the animals that are existing in zoo and print the characteristic of each animal*/


package zoopack;
import animalspack.*;   //import all classes and sub-classess from animialspack <but not from subpackages>
class VandalurZoo
{
    public static void main(String args[])
    {
        Lion l=new Lion("Brown",200.2f,12);
        System.out.println(l.isVegetarian()?"Lion, Yes Vegetarian":"Lion, Non-Vegetarian");
        System.out.println(l.canClimb()?"Yes, Lion Can Climb":"Lion, Can't Climb");
        System.out.println("Lion Sound: "+l.getSound());


        Elephant e=new Elephant("Dark-Brown",800.25f,19);
        System.out.println(e.isVegetarian()?"Elephant, Yes-Vegetarian":"Elephant, Non-Vegetarian");
        System.out.println(e.canClimb()?"Elephant, Yes, can Climb":"Elephant, Can't Climb");
        System.out.println("Elephant sound: "+e.getSound());
    }
}
//=========================================================================================
```

Go to cmd and do the following:

```
Lion    Elephant   VandalurZoo
                        C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\PUNEET BANGA>cd Desktop

C:\Users\PUNEET BANGA\Desktop>javac -d . Lion.java Elephant.java VandalurZoo.jav
a

C:\Users\PUNEET BANGA\Desktop>java zoopack.VandalurZoo
Lion: color, weight and age is: Brown 200.2 and 12
Non-Vegetarian
Can't Climb
Lion Sound: roaring
Elephant color, weight and age is: Dark-Brown 800.25 and 19
Yes-Vegetarian
Can't Climb
Elephant sound: trumpeting

C:\Users\PUNEET BANGA\Desktop>_
```