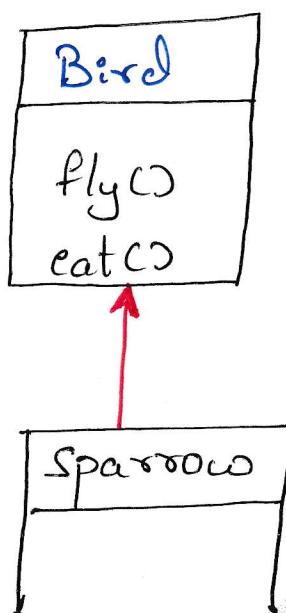


Types of Inheritance

1) Single level Inheritance:



```
class Bird  
{
```

```
    void fly()  
    {
```

```
        System.out.println("A bird flies in the sky");
```

```
}
```

```
    void eat()  
    {
```

```
        System.out.println("A bird eats worms");
```

```
}
```



```
class Sparrow extends Bird  
{  
}
```

```
public class App  
{  
    public static void main(String[] args)  
    {  
        Sparrow sp = new Sparrow();  
        sp.fly();  
        sp.eat();  
    }  
}
```

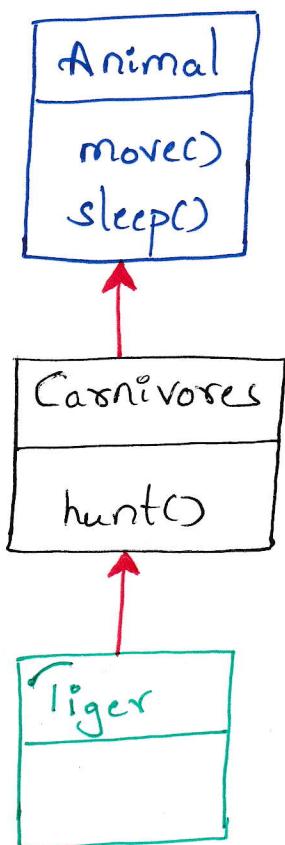
Output:

A bird flies in the sky

A bird eats worms



2) Multi-Level Inheritance :-



```
class Animal
{
    void move()
    {
        System.out.println("Keep moving");
    }

    void sleep()
    {
    }
```



System.out.println("Sleep to relax");

{

}

class Carnivores extends Animal

{

void hunt()

{

System.out.println("Hunt and eat!");

{

}

class Tiger extends Carnivores

{

}

public class AnimalApp

{

public static void main(String [] args)

{



Tiger t = new Tiger();

t.move();

t.sleep();

t.hunt();

}

{

Output:

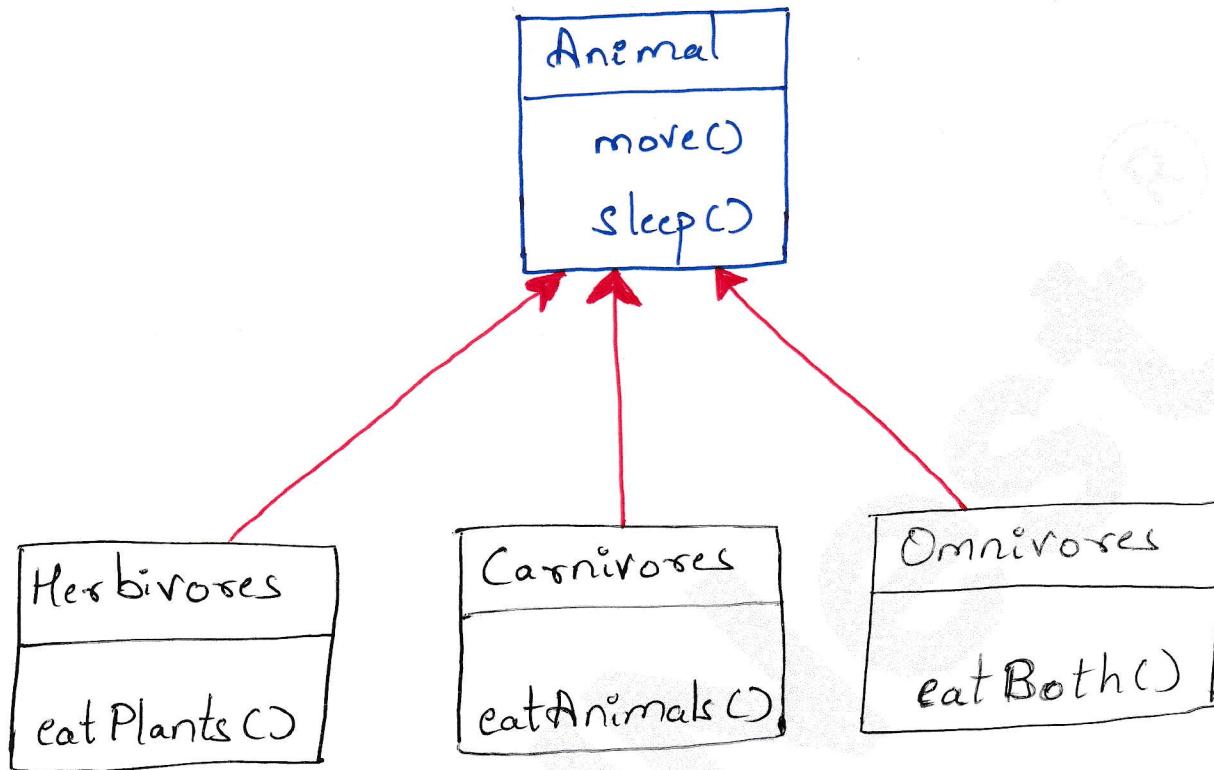
Keep moving

Sleep to relax

Hunt or eat!



3) Hierarchical Inheritance :-



class Animal

{

 void move()

{

 System.out.println("Keep moving");

{



```
void sleep()  
{
```

```
    System.out.println("Sleep to relax");
```

```
}
```

```
}
```

```
class Herbivores extends Animal
```

```
{
```

```
void eatPlants()
```

```
{
```

```
    System.out.println("Herbivores eat plants");
```

```
}
```

```
}
```

```
class Carnivores extends Animal
```

```
{
```

```
void eatAnimals()
```

```
{
```

```
    System.out.println("Carnivores eat other  
    animals");
```

```
}
```



{

class Omnivores extends Animal

{

void eatBoth()

{

System.out.println("Omnivores eat both");

{

{

public class AnimalApp

{

public static void main(String []args)

{

Herbivores h = new Herbivores();

h.move();

h.sleep();

h.eatPlants();

Carnivores c = new Carnivores();



c. move();
c. sleep();
c. eatAnimals();

Omnivores o = new Omnivores();

o.move();
o.sleep();
o.eatBoth();

3

4

Output:-

Keep moving
sleep to relax

Herbivores eat plants

Keep moving
sleep to relax

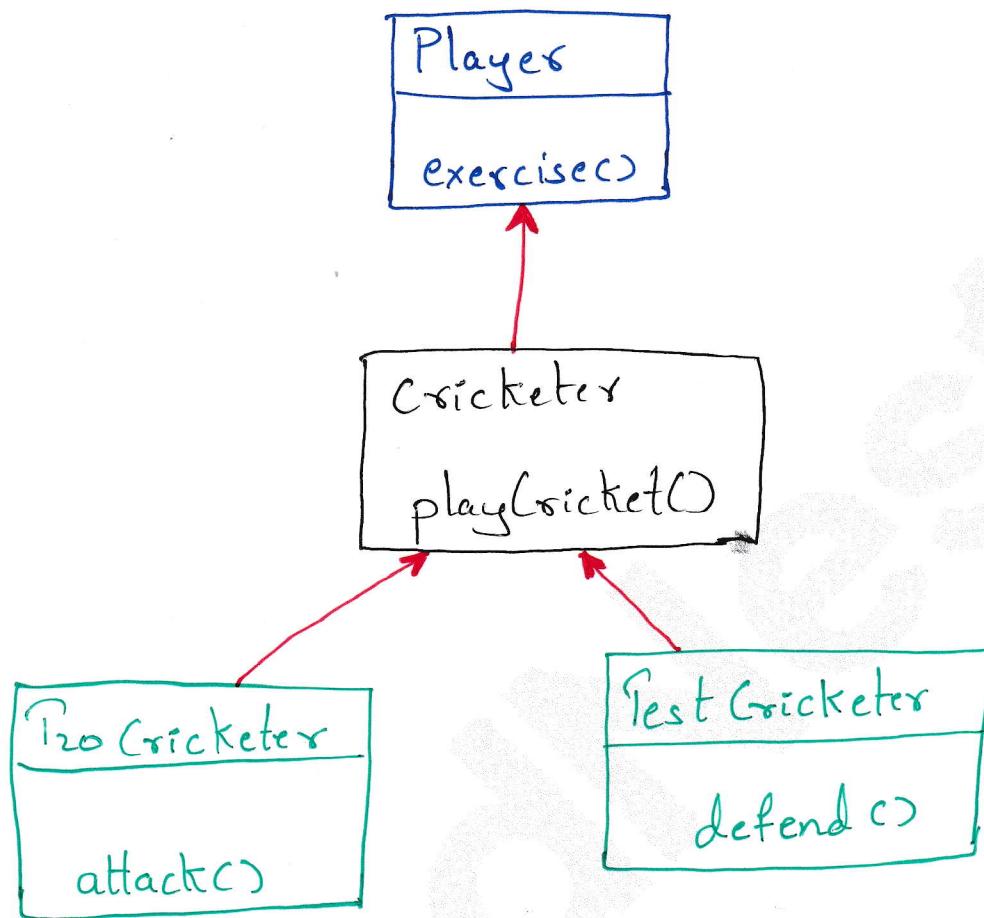
Carnivores eat other animals

Keep moving
sleep to relax

Omnivores eat both



4) Hybrid Inheritance



```
public class PlayerApp
```

{

```
    public static void main(String[] args)
```

{

// Complete this code

{

{

```
class Player
```

{

```
    void exercise()
```

{

```
        System.out.println("Exercise to stay fit");
```

{

{

```
class Cricketer extends Player
```

{

```
    void playCricket()
```

{



System.out.println("playing cricket is fun");

{

{

class T20Cricketer extends Cricketer

{

void attack()

{

System.out.println("Play in aggressive way");

{

{

class TestCricketer extends Cricketer

{

void defend()

{

System.out.println("Play in defensive way");

{

{

