LAB-5

22/10/24

Create an abstract class Animal with the method eat and sleep. Create subclass Lion, Deer and Tiger that extends the animal class and Implement the method eat and sleep differently based on their specific behaviour.

Program

```java
import java.util.Scanner;
abstract class Animal
{
    abstract void eat();
    abstract void sleep();
}
class Lion extends Animal
{
    void eat()
    {
        System.out.println("Lion eats animals");
    }
    void sleep()
    {
        System.out.println("Lion sleeps for a long ti
    }
}
```

```java
class Deer extends Animal
{
    void eat()
    {
        System.out.println("Deer eats grass");
    }
    void sleep()
    {
        System.out.println("Deer sleeps for a short time");
    }
}
class Tiger extends Animal
{
    void eat()
    {
        System.out.println("Tiger eats animals");
    }
    void sleep()
    {
        System.out.println("Tiger sleeps");
    }
}
public class Main
{
    public static void main(String[] args)
    {
```

```
        Animal ~~leen~~ = new lion ();
            l. eat ();
            l. sleep ();
        Animal d = new Deer ();
5           d. eat ();
            d. sleep ();
        Animal t = new Tiger ();
            t. eat ();
            t. sleep ();
10      }
    }
```

Output

15 Lion eats animals.
Lion sleeps for a long time.
Deer eats grass.
Deer sleeps for a short time.
Tiger eats animals.
20 Tiger sleeps for a long time.

```
C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.22000.2538]
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C:\Users\Admin\Downloads>javac Main.java

C:\Users\Admin\Downloads>java Main
Lion eats animals
Lion sleeps for a long time
Deer eats grass
Deer sleeps for a short time
Tiger eats animals
Tiger sleeps for a long time
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C:\Users\Admin\Downloads>
```