

```
1  public class Animal{
2      // Fields/Properties/State
3      private string name;
4      private int weight;
5      private int noOfLegs;
6
7      // Default Constructor
8      public Animal(){
9          this.name = "Dinosaur";
10         this.weight = 4600;
11         this.noOfLegs = 2;
12     }
13
14     // Parameterized Constructor
15     public Animal(string _name, int _weight, int _noOfLegs){
16         this.name = _name;
17         this.weight = _weight;
18         this.noOfLegs = _noOfLegs;
19     }
20
21     // Getter and Setter - Name Field
22     public string getName() {
23         return this.name;
24     }
25
26     public void setName(string _name) {
27         if (_name != "") {
28             this.name = _name;
29         }
30         else {
31             this.name = "Dinosaur";
32         }
33     }
34
35
36     // Getter and Setter - Weight Field
37     public int getWeight(){
38         return this.weight;
39     }
40
41     public void setWeight(int _weight) {
42         if (_weight >= 0) {
43             this.weight = _weight;
44         }
45         else {
46             this.weight = 4600;
47         }
48     }
49
50     // Getter and Setter - NoOfLegs Field
51     public int getNoOfLegs() {
52         return this.noOfLegs;
53     }
54
55     public void setNoOfLegs(int _noOfLegs) {
56         if (_noOfLegs >= 2 && _noOfLegs <= 4) {
57             this.noOfLegs = _noOfLegs;
58         }
59     }
```

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59         else {
60             this.noOfLegs = 2;
61         }
62     }
63
64     // Parent Methods
65     public void eat(){
66         System.out.println("I am eating");
67     }
68
69     public void sleep(){
70         System.out.println("I am going to sleep");
71     }
72 } // End of Parent Class "Animal"
73
74
75 public class pet extends Animal {
76
77     // Fields of Child Class
78     private bool isVaccinated;
79     private bool isBathed;
80
81     // Default Constructor of Child Class
82     public pet(){
83         this.isVaccinated = false;
84         this.isBathed = false;
85     }
86
87     // Parameterized Constructor of Child Class
88     public pet(string _name, int _weight, int _noOfLegs, bool _isVaccinated,
89 bool _isBathed){
90         super(_name, _weight, _noOfLegs);
91         this.isVaccinated = _isVaccinated;
92         this.isBathed = _isBathed;
93     }
94
95     // Getter and Setter - IsVaccinated Field
96     public bool getVaccinated(){
97         return this.isVaccinated;
98     }
99     public void setVaccinated(bool _isVaccinated){
100         this.isVaccinated = _isVaccinated;
101     }
102
103     // Getter and Setter - IsBathed Field
104     public bool getBathed(){
105         return this.isBathed;
106     }
107     public void setBathed(bool _isBathed){
108         this.isBathed = _isBathed;
109     }
110
111     // Child Methods
112     public void play(){
113         System.out.println("I am playing with human");
114     }
115 } // End of Child Class "Pet"
```