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1 -----GenericType.java-----
2 package com.ameya.test;
3
4 public class GenericType<T> {
5
6     private T t;
7     public T get() {
8         return this.t;
9     }
10    public void set(T t1) {
11        this.t=t1;
12    }
13    public static void main(String[] args) {
14        GenericType<String> type=new GenericType<String>();
15        type.set("Ameya");
16        System.out.println(type.get());
17        GenericType type1=new GenericType();//Raw Type
18        type1.set("Amol");
19        System.out.println(type1.get());
20        type1.set(10);//Autoboxing support
21        System.out.println(type1.get());
22    }
23 }
24 -----GenericInterface.java-----
25 package com.ameya.intfs;
26
27 public interface GenericInterface <T,S>{
28     S doOneOperation(T t);
29     T doSecondOperation(S s);
30 }
31 -----DemoGenericInterfaces.java-----
32 package com.ameya.intfs.impl;
33
34 import com.ameya.intfs.GenericInterface;
35
36 public class DemoGenericInterfaces implements
    GenericInterface<String, Integer> {
37
38     @Override
39     public Integer doOneOperation(String t) {
40         //Some Code

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41         return t.length();
42     }
43
44     @Override
45     public String doSecondOperation(Integer s) {
46         //Some Code
47         return s+" Stringized";
48     }
49
50
51 }
52 -----TestGenericInterface.java-----
53 package com.ameya.test;
54
55 import com.ameya.intfs.impl.DemoGenericInterfaces;
56
57 public class TestGenericInterface {
58
59     public static void main(String[] args) {
60         DemoGenericInterfaces obj=new DemoGenericInterfaces();
61         System.out.println(obj.doOneOperation("abcdef"));
62         System.out.println(obj.doSecondOperation(100));
63     }
64
65 }
66 -----ClassA.java-----
67 package com.ameya.generics;
68
69 public class ClassA{
70     public void printClass(){
71         System.out.println("I am in super class A");
72     }
73 }
74 -----ClassB.java-----
75 package com.ameya.test;
76
77 public class ClassB extends ClassA {
78
79     public void printClass() {
80         System.out.println("I am in Sub class B");
81     }

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82 }
83 -----ClassC.java-----
84 package com.ameya.test;
85
86 public class ClassC extends ClassA {
87     public void printClass() {
88         System.out.println("I am in sub class C");
89     }
90 }
91 -----BoundedEx.java-----
92 package com.ameya.test;
93
94 public class BoundedEx<T extends ClassA> {
95
96     private T objRef;
97     public BoundedEx(T obj) {
98         this.objRef=obj;
99     }
100    public void doRunTest() {
101        this.objRef.printClass();
102    }
103 }
104 -----TestBoundedEx.java-----
105 package com.ameya.test;
106
107 public class TestBoundedEx {
108
109     public static void main(String[] args) {
110         BoundedEx<ClassC> c=new BoundedEx<ClassC>(new ClassC());
111         BoundedEx<ClassB> b=new BoundedEx<ClassB>(new ClassB());
112         BoundedEx<ClassA> a=new BoundedEx<ClassA>(new ClassA());
113         c.doRunTest();
114         b.doRunTest();
115         a.doRunTest();
116         //BoundedEx<String> s=new BoundedEx<String>(new
            String("abcd"));
117     }
118
119 }
120

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