

ΠΡΟΤΕΙΝΟΜΕΝΕΣ
ΛΥΣΕΙΣ ΑΣΚΗΣΕΩΝ
Wrapper Classes - ArrayList

ΑΣΚΗΣΗ-1^η (Μετατροπές αντικειμένου τύπου Integer σε όλους τους βασικούς τύπους)

```
class IntegerObjectToNumericPrimitiveTypesExample {  
    public static void main(String[] args) {  
        Integer intObj = new Integer("10");  
        //byteValue() gia metatrophe se byte typo  
        byte b = intObj.byteValue();  
        System.out.println(b);  
  
        //shortValue() gia metatrophe se short typo  
        short s = intObj.shortValue();  
        System.out.println(s);  
  
        //intValue() gia metatrophe se int typo  
        int i = intObj.intValue();  
        System.out.println(i);  
  
        //longValue() gia metatrophe se long typo  
        long l = intObj.longValue();  
        System.out.println(l);  
  
        //floatValue() gia metatrophe se float typo  
        float f = intObj.floatValue();  
        System.out.println(f);  
  
        //doubleValue() gia metatrophe se double typo  
        double d = intObj.doubleValue();  
        System.out.println(d);  
  
        System.out.println("Synolo: "+(b+s+i+f+d));  
    }  
}
```

```
C:\Windows\system32\cmd.exe -  X
10
10
10
10
10.0
10.0
Synolo: 60.0
Press any key to continue . . .
```

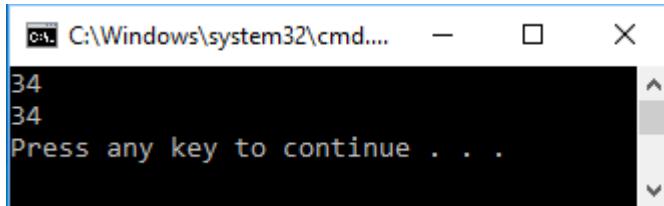
ΑΣΚΗΣΗ-2η (Υλοποιηση μεθόδων της διεπαφής (κλασική χρήση), σε κλάση που υλοποιεί την διεπαφή)

```
class WraperDemo1 {
    public static void main(String[] args) {
        String sar[] = {"1", "10", "400", "100000000", "10.0000000", "10.0000000000000000"};
        byte b = Byte.parseByte(sar[0]); // metatropi tou ar.String se byte
        System.out.println(b);
        short s = Short.parseShort(sar[1]); // metatropi tou ar.String se short
        System.out.println(s);
        int i = Integer.parseInt(sar[2]); // metatropi tou ar.String se int
        System.out.println(i);
        long l = Long.parseLong(sar[3]); // metatropi tou ar.String se long
        System.out.println(l);
        float f = Float.parseFloat(sar[4]); // metatropi tou ar.String se float
        System.out.println(f);
        double d = Double.parseDouble(sar[5]); // metatropi tou ar.String se double
        System.out.println(d);
        double synolo=(b+s+i+l+f+d);
        System.out.println("To athrisma meta: "+synolo);
    }
}
```

```
C:\Windows\system32\cmd.exe -  X
1
10
400
100000000
10.0
10.0
To athrisma meta: 1.00000426E8
Press any key to continue . . .
```

ΑΣΚΗΣΗ-3^η (Autoboxing και Unboxing)

```
class AutoboxingUnboxingExample1 {  
  
    public static void AMethod(Integer num){  
        System.out.println(num);  
    }  
  
    public static void UMethod(int num){  
        System.out.println(num);  
    }  
  
    public static void main(String[] args) {  
        AMethod(34);  
        UMethod(new Integer(34));  
    } }
```



ΑΣΚΗΣΗ-4^η (Χειρισμός του ArrayList – wrapper κλάσεις)

```
import java.util.ArrayList;  
import java.util.List;  
  
class WrapperClasses_ArrayList {  
    public static void main(String[] args) {  
  
        ArrayList<Integer> list = new ArrayList<>();  
        ArrayList<Double> list1 = new ArrayList<>();  
  
        list.add(2);  
        list.add(7);  
        list.add(8);  
        System.out.println(list);  
  
        list1.add(3.0);  
        list1.add(4.0);  
        list1.add(9.0);  
        System.out.println(list1);  
  
        int x=Integer.valueOf(list.get(0));  
        int y=Integer.valueOf(list.get(1));  
        int z=Integer.valueOf(list.get(2));  
    } }
```

```

int s=x+y+z;
System.out.println("To athroisma ton akeraion= "+s);

double x1=Double.valueOf(list1.get(0));
double y1=Double.valueOf(list1.get(1));
double z1=Double.valueOf(list1.get(2));
double s1=x1+y1+z1;
System.out.println("To athroisma ton pragmatikon ar.= "+s1);
}

```

ΑΣΚΗΣΗ-5^η (Χειρισμός του ArrayList)

```

import java.util.*;
class ArrayListExample {
    public static void main(String args[]) {

        //ArrayList - typos string
        ArrayList<String> obj = new ArrayList<String>();

        //prostthiki stoicheion
        obj.add("Takis");
        obj.add("Roulis");
        obj.add("Sakis");
        obj.add("Nikos");
        obj.add("Kostas");

        //emfanisi stoicheion
        System.out.println("H lista onomaton-----: "+obj);

        //prostthiki stoicheiou se sygkekrimeni thesi
        obj.add(0, "Panos");
        obj.add(1, "Vasilis");

        //emfanisi stoicheion meta tis prosthikes
        System.out.println("H lista onomaton (me prosthikes)-----: "+obj);
        //diagrafi stoicheion me sygkekrimeno onoma
        obj.remove("Nikos");
        obj.remove("Kostas");

        System.out.println("H lista onomaton(diagrafi tou Nikou kai Kosta:      "+obj);

        //diagrafi stoicheiou se sygkekrimeni thesi
        obj.remove(3);
        System.out.println("H lista onomaton(diagrafi se sygkekrimeni thesi(3)): "+obj);
    }
}

```

```

C:\Windows\system32\cmd.exe
H lista onomaton-----: [Takis, Roulis, Sakis, Nikos, Kostas]
H lista onomaton (me prosthikes)-----: [Panos, Vasilis, Takis, Roulis, Sakis, Nikos, Kostas]
H lista onomaton(diagrafi tou Nikou kai Kosta:      [Panos, Vasilis, Takis, Roulis, Sakis]
H lista onomaton(diagrafi se sygkekrimeni thesi(3)): [Panos, Vasilis, Takis, Sakis]
Press any key to continue . . .

```