CSE1007 Java Programming In-Lab Activity L3+L4 on 20-09-2021

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1. Write a Java program to get n numbers using command line arguments to store it in an array then sort the array based on descending order by ignoring the numbers which contains zero's(Ex: 10203 - number contains two zero's, so ignore this number)

```
import java.util.Scanner;
public class Descending_Order
{
    public static void main(String[] args)
    {
        int n, temp;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter no. of elements you want in array:");
        n = s.nextInt();
        int a[] = new int[n];
        System.out.println("Enter all the elements:");
        for (int i = 0; i < n; i++)
        {
            a[i] = s.nextInt();
        }
        for (int i = 0; i < n; i++)
        {
            for (int j = i + 1; j < n; j++)
            {
                if (a[i] < a[j])
                {
                    temp = a[i];
                    a[i] = a[j];
                    a[j] = temp;
                }
            }
        }
        System.out.print("Descending Order:");
        for (int i = 0; i < n - 1; i++)
        {
            System.out.print(a[i] + ",");
        }
        System.out.print(a[n - 1]);
    }
}
```

Result

CPU Time: sec(s), Memory: kilobyte(s) compiled and executed in 15.463 sec(s)

```
Enter no. of elements you want in array:5
2
3
5
1
4

Descending order: 5, 4, 3, 2, 1
```

2. Mr. Wang is having two different companies, he wanted to know the profit earned by a company. In this regard, create a class 'Company' with a method 'getProfit()' to return a value 0. Further, create two subclasses 'CompanyA' and 'CompanyB' for the class Company. Each subclass should have the same method 'getProfit()' in order to receive the profit earned by a particular company. All the subclasses should inherit the class 'Company'. Further create a main class in which create objects for the two subclasses and call the method 'getProfit()' using each object. Wherever applicable incorporate the advantages of this keyword to help Mr. Wang to know his profit.

Note: Minimum three unique advantages of this keyword must be implement.

```
class Company {
    double profit;

    public Company(double profit){

        this.profit = profit;
    }

    public double getProfit(){
        return 0;
    }

}

class CompanyA extends Company{


    public CompanyA(double profit) {
        super(profit);
    }

    @Override
    public double getProfit(){

        return this.profit;
    }

}

class CompanyB extends Company{


    public CompanyB(double profit) {
        super(profit);
    }

    @Override
    public double getProfit(){
        return this.profit;
    }

}
```

```java
public class Main{

    public static void main(String[] args){

        CompanyA cA = new CompanyA(15000.0d);
        CompanyB cB = new CompanyB(12000.0d);
        System.out.println("Profit earned by CompanyA = " + cA.getProfit());
        System.out.println("Profit earned by CompanyB = " + cB.getProfit());

    }
}
```

Result

CPU Time: 0.28 sec(s), Memory: 34404 kilobyte(s) compiled and executed in 1.049 sec(s)

```
Profit earned by CompanyA = 15000.0
Profit earned by CompanyB = 12000.0
```
