

**Spring 2019 – Object Oriented Programming**  
**Quiz No. 3 SOLUTION**

- Write a program that uses a class named CorpData to store the following information on a company division which contains Division name (such as East, West, North, or South), First quarter sales, Second quarter sales, Third quarter sales, Fourth quarter sales. Total annual sales (static) Average quarterly sales (static). **(1point)**
- The program should create four objects of this class, each representing one of the following corporate divisions: East, West, North, and South. Each object should initialize the name and all quarter sales except for total and average quarter sales (Use parameterized constructor). **(1point)**
- Each object should be passed in turn to a function that calculates and stores the total sales and average quarterly sales for that division. (static method) **(1point)**
- Once this has been done for each division, each object should be passed in turn to a function that displays the division name, total sales, and quarterly average. (static method) **(1point)**

```
using namespace std;
#include<iostream>
class CorpData {
    private:
        string name;
        double first,second,third,fourth;
        static double total,average;
    public:
        CorpData(string n,double f, double s, double t, double fo)    {
            name = n;
            first = f;
            second = s;
            third = t;
            fourth = fo;
        }
}
```

```

static void Calculate(CorpData obj) {
    total = obj.first+obj.second+obj.third+obj.fourth;
    average = total/4;
}

static void Display(CorpData obj) {
cout<<" Name:" <<obj.name << " Total:" <<total <<" Average:" <<
average<<endl;
};

double CorpData::average=0;
double CorpData::total=0;

int main(){
    CorpData east("East",1,1,1,1);
    CorpData west("West",2,2,2,2);
    CorpData north("North",3,3,3,3);
    CorpData south("South",1,2,3,4);
    CorpData::Calculate(east);
    CorpData::Display(east);
    CorpData::Calculate(west);
    CorpData::Display(west);
    CorpData::Calculate(north);
    CorpData::Display(north);
    CorpData::Calculate(south);
    CorpData::Display(south);
}

```

C:\Users\mahrukh.khan\Desktop\CP-Spring2019\Quizzes\Q1

```

Name:East Total:4 Average:1
Name:West Total:8 Average:2
Name:North Total:12 Average:3
Name:South Total:10 Average:2.5

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```