

# QUIZ 1

## Algorithm and Data Structure



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This is constructor with parameter to store the data of employees

```
public static void main(String[] args) {  
    Employee[] emp = new Employee[4];  
  
    emp[0] = new Employee(na:"Rara", ag:30, sal1:1500000, sal2:2000000, sal3:1250000, la:500000, ta:100000);  
    emp[1] = new Employee(na:"Leo", ag:40, sal1:2500000, sal2:1500000, sal3:900000, la:250000, ta:250000);  
    emp[2] = new Employee(na:"Sasha", ag:38, sal1:2000000, sal2:850000, sal3:2000000, la:300000, ta:150000);  
    emp[3] = new Employee(na:"Raden", ag:45, sal1:3000000, sal2:2500000, sal3:1000000, la:450000, ta:100000);  
  
    for (int i = 0; i < emp.length; i++) {  
        emp[i].printData();  
        emp[i].totalSalary();  
        System.out.println();  
    }  
}
```

Name: Rara  
Age: 30  
Salary: 4750000.0  
Living Allowance: 500000  
Transportation Allowance: 100000  
Total Salary: 5350000.0  
Total Allowance: 600000.0

Name: Leo  
Age: 40  
Salary: 4900000.0  
Living Allowance: 250000  
Transportation Allowance: 250000  
Total Salary: 5400000.0  
Total Allowance: 500000.0

Name: Sasha  
Age: 38  
Salary: 4850000.0  
Living Allowance: 300000  
Transportation Allowance: 150000  
Total Salary: 5300000.0  
Total Allowance: 450000.0

Name: Raden  
Age: 45  
Salary: 6500000.0  
Living Allowance: 450000  
Transportation Allowance: 100000  
Total Salary: 7050000.0  
Total Allowance: 550000.0

```

// Calculate total salary of patient whose age is >35
double sum = 0;
for (int i = 0; i < emp.length; i++) {
    if (emp[i].age > 35) {
        sum = sum + emp[i].totalSalary();
    }
}

// Calculate average
double avg = 0;
avg = sum/3;
System.out.println("Average of total salary = " + avg);

```

Average of total salary = 5916666.666666667

```

// Find biggest allowance of 35-50 years old employee
double maxAllow35 = 0;
int idx35 = 0;
for (int i = 0; i < emp.length; i++) {
    if (emp[i].age > 35) {
        sum = sum + emp[i].totalSalary();
        if (emp[i].totalAllowance() > maxAllow35) {
            maxAllow35 = emp[i].totalAllowance();
            idx35 = i;
        }
    }
}
System.out.println();
System.out.println(x:"Employee of 35-50 years old who has the biggest allowance");
emp[idx35].printBiggestAllowance();

```

Employee of 35-50 years old who has the biggest allowance  
 Name: Raden  
 Age: 45  
 Total Allowance: 550000.0

```

// Find biggest allowance of all employee
double maxAllow = 0;
int idx = 0;
for (int i = 0; i < emp.length; i++) {
    if (emp[i].totalAllowance() > maxAllow) {
        maxAllow = emp[i].totalAllowance();
        idx = i;
    }
}

System.out.println();
System.out.println(x:"Employee who has the biggest allowance");
emp[idx].printBiggestAllowance();

```

```
Employee who has the biggest allowance  
Name: Rara  
Age: 30  
Total Allowance: 600000.0
```