

Think and Tell

Calculate the Average Score

Individual scores obtained by the top five students of a class are listed below. How can we create a function to calculate the average score for these students?

scoreOfStudent1 = 87
scoreOfStudent2 = 73
scoreOfStudent3 = 98
scoreOfStudent4 = 67
scoreOfStudent5 = 89



Calculating the Average Score: Solution

```
public class scoreCalculator {  
  
    public int calcScore(int scoreOfStudent1, int scoreOfStudent2, int scoreOfStudent3, int scoreOfStudent4, int scoreOfStudent5) {  
        int avgScore = (scoreOfStudent1 + scoreOfStudent2 + scoreOfStudent3 + scoreOfStudent4 + scoreOfStudent5)/5;  
        return avgScore  
    }  
}
```

Calculating the Average Score: Solution

```
public class scoreCalculator {  
  
    public int calcScore(int scoreOfStudent1, int scoreOfStudent2, int scoreOfStudent3, int scoreOfStudent4, int scoreOfStudent5) {  
        int avgScore = (scoreOfStudent1 + scoreOfStudent2 + scoreOfStudent3 + scoreOfStudent4 + scoreOfStudent5) / 5;  
        return avgScore;  
    }  
}
```

**Will this solution work, if we have to find the average score for the entire class of 30 students?
Can we pass 30 different variables as parameters to a function?**

Calculating the Average Score: Solution

The calcScore method returns the average score.

How can we make a program return both the individual and the average score?

```
public class scoreCalculator {  
  
    public int calcScore(int scoreOfStudent1, int scoreOfStudent2, int scoreOfStudent3, int scoreOfStudent4, int scoreOfStudent5) {  
        int avgScore = (scoreOfStudent1 + scoreOfStudent2 + scoreOfStudent3  
+ scoreOfStudent4 + scoreOfStudent5)/5;  
        return avgScore  
    }  
}
```

Create Functions that Accept and Return Multiple Values Using Arrays



Learning Objectives

- Pass an array object as a parameter to a method
- Return an array object from a method



Pass an Array as a Parameter to a Method

- In Java, an array is an object, which can be passed as a reference to a method

	Index 0	Index 1	Index 2	Index 3	Index 4
moviesName	Mortal Kombat	Hacker	Containment	Scientist	Godzilla
	moviesName[0]	moviesName[1]	moviesName[2]	moviesName[3]	moviesName[4]

Passing the moviesName array to the displayMovies method

```
displayMovies(moviesName);
```


```
public String displayMovies(String[] moviesName) {
    statements;
}
```

Return an Array from a Method

- In Java, a method can also return as an array

```
public String[] displayMovies(String[] moviesName){  
    statements;  
    statements;  
    statements;  
    return moviesName;  
}
```

The “displayMovies” method returning the moviesName array after processing



Interactive Demo

Write a program that accepts movie details with their ratings, maps the following rating captions with the names of the movies as per the movie ratings and displays them

Movie Rating	Rating Caption
4.5 to 5	Excellent
4 to 4.5	Good
3 to 4	Average
Below 3	Bad



Key Takeaways

- Passing an array object to a method
 - Returning an array object from a method
- method





Thank you!