

**HACETTEPE UNIVERSITY**  
**DEPARTMENT OF COMPUTER ENGINEERING BBM104**



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**Subject : Introduction to Java**

**“HelloWorld”**

## Aim

That was warm up assignment to enter the Java. Learning how to read data from file. I done few application which do some mathematical calculations, in this assignment.

## Software Usage

This program is console application. Reading data from input file. Applying my functions on inputs and create output datas. I used Eclipse Neon IDE (Integrated Development Environment) for coding activities

## Personal Comments

I learned simple Java syntaxes such as changing variable kind , take input from file , try-catch, while, for and make methods. I installed an Eclipse , running my application on terminal or console it was very difficult for me. Solving this problem cost me a day but I did it. In this time, I learned what is the packages , .classpath , .project and .java-.class different. (javac HelloJava.java , java HelloJava Input.txt). When I calculated the factorial , I learned which variable types has how many maximum size. Writing function was easy for me because first semester I did more difficult things then this assignment .

## Algorithm

1. Start from main methods
2. Create scanner object for take the inputs
3. While it has new input line , take input
4. This application bring my methods by first word of line
5. Every method doing their missions
6. Print result the console or terminal

## Sample Results

Input.txt

```
IntegrateReimann Func1 2 7 10
IntegrateReimann Func1 2 7 100
IntegrateReimann Func2 2 7 10
IntegrateReimann Func2 2 7 100
IntegrateReimann Func3 0.2 0.5 10
Arcsinh 0.8
Armstrong 3
IntegrateReimann Func1 -5 12 40
IntegrateReimann Func1 -5 12 200
IntegrateReimann Func2 -12 17 10
IntegrateReimann Func2 -12 17 100
IntegrateReimann Func3 0.2 0.6 50
Arcsinh 0.4
Armstrong 4
IntegrateReimann Func1 -8 6 10
IntegrateReimann Func1 -8 6 50
IntegrateReimann Func1 -8 6 100
IntegrateReimann Func1 -8 6 150
IntegrateReimann Func2 -4 13 10
IntegrateReimann Func2 -4 13 50
IntegrateReimann Func2 -4 13 100
IntegrateReimann Func2 -4 13 150
IntegrateReimann Func3 -0.1 0.4 90
```

output

```
[b21526638@rdev 20dev1]$ java HelloJava Input.txt
IntegrateReimann Func1 2 7 10 Result : 104.0625
IntegrateReimann Func1 2 7 100 Result : 104.16562499999958
IntegrateReimann Func2 2 7 10 Result : 126.77543832897483
IntegrateReimann Func2 2 7 100 Result : 126.65079267797756
IntegrateReimann Func3 0 0 10 Result : 0.1026410464133106
Arcsinh 0.8 Result : 0.73298321768061
Armstrong 3 Result : 0 1 2 3 4 5 6 7 8 9 153 370 371 407
IntegrateReimann Func1 -5 12 40 Result : 608.9107812499999
IntegrateReimann Func1 -5 12 200 Result : 609.1564312500011
IntegrateReimann Func2 -12 17 10 Result : 565.5404384807164
IntegrateReimann Func2 -12 17 100 Result : 568.4083507135506
IntegrateReimann Func3 0 0 50 Result : 0.1551709602219047
Arcsinh 0.4 Result : 0.3900353327969141
Armstrong 4 Result : 0 1 2 3 4 5 6 7 8 9 153 370 371 407 1634 8208 9474
IntegrateReimann Func1 -8 6 10 Result : 296.38
IntegrateReimann Func1 -8 6 50 Result : 298.5752
IntegrateReimann Func1 -8 6 100 Result : 298.64380000000002
IntegrateReimann Func1 -8 6 150 Result : 298.6565037037038
IntegrateReimann Func2 -4 13 10 Result : 384.1318860305626
IntegrateReimann Func2 -4 13 50 Result : 382.1284469791137
IntegrateReimann Func2 -4 13 100 Result : 382.0504600486261
IntegrateReimann Func2 -4 13 150 Result : 382.0359648793622
IntegrateReimann Func3 0 0 90 Result : 0.07398540663088955
```

If there had mistake in Input.txt , you will take this error.

```
Exception in thread "main" java.util.NoSuchElementException  
    at java.util.Scanner.throwFor(Scanner.java:862)  
    at java.util.Scanner.next(Scanner.java:1371)  
    at HelloJava.main(HelloJava.java:74)
```