

Java exercise in the lab

1. Follow the steps below:
 - a) Create a new java project
 - b) Create a class with name *debug_test*
 - c) Copy the following fields in the *debug_test* class

```
import java.util.Random;
public class debug_test {
    public static void main(String[] args) {
        double sum,sub,mul,div;
        int r1,r2;
        Random generator = new Random();
        for (int i=1;i<=4;i++)
        {
            r1 = generator.nextInt();
            r2=generator.nextInt();
            Sum=r1+r2;
            Sub=r1-r2;
            Mul=r1*r2;
            Div=r1/r2;
        }
    }
}
```

- d) Use the debugger and fill in the table below:

r1=

r2=

iteration	Sum	Sub	Mul	Div
1				
2				
3				
4				

2. How many methods for rounding numbers are in the *java.lang.math*? (use www.javadoconline.com)

3. Use the sample program and write a simple phonebook with the following characteristics:

- a) First, the user enters the number of entities
 - b) For each entity, the program asks about the *name* and the *telephone number*
 - c) After the user enters all the names and *telephone numbers*, a window is displayed which shows all the information (i.e., in each row : *Name & Tel No*)

d) You should create two classes in your program: one for contact information and one for your phonebook.

You may need to have an array of objects in your program. For this purpose you can define them as following:

```
// example from sample program
```

```
Student[] s=new Student[10];  
for (int i=1;i<=10;i++)  
    s[i]=Student();
```