

Pink JExercise 1

The purpose of the following exercises are to get familiar with using variables and Scanner

1. Write code that calculates the sum of 3, 8 and 12 and prints the result.
2. Look at the following program, where four integers are being read from the keyboard and some (uninteresting) calculations are made:

```
public class Example {  
    public static void main(String[] args) {  
        Scanner scan = new Scanner(System.in);  
        int a = scan.nextInt();  
        int b = scan.nextInt();  
        int c = scan.nextInt();  
        int d = scan.nextInt();  
        int e = (c + d) - (a + b);  
        c = c + 2;  
        a = (2 * e + c) / 4;  
        System.out.println(a + " " + b + " " + c + " " + d + " " + e);  
    }  
}
```

- a) What values will be printed when the integers 1, 2, 4 and 8 are read from the keyboard?
 - b) What values will be printed when the integers 1, 2, 8 and 4 are read from the keyboard?
3. Two integer variables *a* and *b* have been declared and have now values. Write some code that changes the values on *a* and *b*. For example:

```
int a = 10;  
int b = 25;  
// ... your code  
System.out.println(a + " " + b); // gives the output 25 10
```

4. **Write your own calculator with the basic operators: +, -, *, /.**

Example:

When writing the numbers 24 and 10:

The sum of the numbers is 34.0

The difference between the numbers is 14.0

The product of the numbers is 240.0

The ratio between the numbers is 2.4

5. **Write a program that reads 5 values of temperatures and calculates and prints the average temperature.**

6. **Input consists of three numbers: time in hours, minutes and seconds. Write code that reads the input and prints the time in seconds. It can for example look like:**

Write the time (hours, minutes, seconds):

2 10 43

Total seconds: 7843

The purpose of the following exercises are to combine and get familiar with *if and else-statement*.

7. **Write a program that compares the values in a and b. Store the maximum value in a variable and print it out.**
8. **Write a program (a class and a main-method) that first reads a starting time (two numbers, hours and minutes, i.e. 12 41) and then another time (i.e. 16 28). Let the program print the time difference in hours and minutes. You can assume that the second time is larger than the starting time.**
9. **Write a program that prints a specific sentence depending on the age of the person**
- a. "You are young" - if 12 or under
 - b. "You are a teenager" - if between 13-19
 - c. "You are a grown up" - if between 20-64
 - d. "You are a senior" - if 65 or older