

## Activity4 primitive data types, conditional statements, loops and data structure

### Exercises1

Evaluate the following expressions and give the right answer. All the steps should be clearly presented.

- $(11 \leq 3*2+5) \parallel (6*2===4*3) \&\& !(2+2===4)$
- $(11 > 3*2+5) \parallel (6*2 \leq 4*3) \&\& (2+2===4)$
- $(11 > 3*2+5) \parallel (6*2 \leq 4*3) \&\& !(true)$

### Exercises2

Write a program in JavaScript language to read students scores and assign letter grades according to the following scale:

Scores	90-100	80-89	70-79	60-69	0-59
Grade	A	B	C	D	E

- The program should keep track of the number of As, Bs, Cs, Ds and Es.
- When all the grades have been printed the program should print a grade distribution giving the number of students who received each grade.
- The scores are collected from the keyboard and if the score is outside the range 0-100, the computer should print the score and the message **'INVALID SCORE'**.

### Exercises3

Write a program in JavaScript that reads the length and the width of an arbitrary number (N) of plots and calculate their area and perimeter of each. The program should print the length, width, area, perimeter of each field as well as the total area and total perimeter of all the fields.

### Exercises4

Write a Program in JavaScript to compute the sales tax on a purchase and the total amount that must be paid after the tax has been added to the purchase amount.

### Exercises5

Write a program in JavaScript that reads the radius of 10 circles and calculate the area of each. The program should print the radius as well as the area of each circle.

### Exercises6

Write a program in JavaScript that solves the following equations:

- $Ax+B=0$ , where A and B are real numbers and x the unknown value.
- $Ax^2+Bx+C=0$ , where A, B and C are real numbers and x the unknown value.
- $\begin{cases} ax+by=c \\ dx+ey=f \end{cases}$  Where a, b, c, d, e and f are real numbers, but x and y the unknown values.