1. **Write functions for working with shapes in standard Planar coordinate system**
   * **Points are represented by coordinates P(X, Y)**
   * **Lines are represented by two points, marking their beginning and ending**
     + **L(P1(X1,Y1),P2(X2,Y2))**
   * **Calculate the distance between two points**
   * **Check if three segment lines can form a triangle**
2. **Write a function that removes all elements with a given value**
   * **Attach it to the array class**
   * **Read about prototype and how to attach methods**
3. **Write a function that makes a deep copy of an object**
   * **The function should work for both primitive and reference types**
4. **Write a function that checks if a given object contains a given property**var obj = …;

var hasProp = hasProperty(obj,"length");

1. **Write a function that finds the youngest person in a given array of persons and prints his/hers full name**
   * **Each person have properties firstname, lastname and age, as shown:**

var persons = [

{firstname : "Gosho", lastname: "Petrov", age: 32},

{firstname : "Bay", lastname: "Ivan", age: 81},…];

1. **Write a function that groups an array of persons by age, first or last name. The function must return an associative array, with keys - the groups, and values -arrays with persons in this groups**
   * **Use function overloading (i.e. just one function)**
   * var persons = {…};
   * var groupedByFname = group(persons,"firstname");
   * var groupedByAge= group(persons,"age");