

Q5 H14:

```
var compter_car = function(string, car){
    var cmp = 0;
    for(var i=0; i < string.length; i++) {
        if(string.charAt(i) == car)
            cmp++;
    }
    return cmp;
};

var tests = function(){
    assert(compter_car("Bonjour Monsieur", "o") == 3);
    assert(compter_car("Bonjour Monsieur", "z") == 0);
    assert(compter_car("", "o") == 0);
};

tests();
```

Q2(a) A2013

```
var nbPair = function(tab){
    var cmp = 0;
    for(var i = 0; i < tab.length; i++){
        if(tab[i]%2 == 0)
            cmp++;
    }
    return cmp;
};

print(nbPair([1,2,4,9,6]));
```

Q3 a A13

```
var quiz2 = function(t,j){
    for(var i=0; i < t.length; i++)
        if(i === j)
            return t[j];
    return -1;
};

//fonction simplifiée
var quiz2_s = function(t,j){
    return (j>=0 && j < t.length ? t[j] : -1);
};

print(quiz2(["a", "b", "c"], 2));
print(quiz2(["a", "b", "c"], 100));
print(quiz2(["a", "b", "c"], "a"));

print(quiz2_s(["a", "b", "c"], 2));
print(quiz2_s(["a", "b", "c"], 100));
print(quiz2_s(["a", "b", "c"], "a"));
```

Q3 b A13 - réponse : non

```
var quiz3a = function(a,b){
    if((a === 4) && (b ===5))
        return a+b;
    else {
        if(b === 5) return a +b;
        return (a === 4)?a:b;
    }
};
```

```

    }
};
var quiz3a_e = function(a,b){
    if(a === 4) {
        if(b === 5) return a + b;
        else
            return a;
    }
    return a;
};

print(quiz3a(7,1)); //1
print(quiz3a_e(7,1)); //7

```

Q3 c A13 - réponse : non

```

var quiz4a = function(a,b){
    if(a === b){
        if(a === 4) return true;
    }
    else
        if(a < b)
            return true;
};

var quiz4b = function(a,b){
    if(a < b)
        return true;
    return (a===4) && (b===4);
};

print(quiz4a(9,1)); //no value
print(quiz4b(9,1)); // false

```

Q3 d A13 - non

```

var quiz5a = function(i){
    var sum = 0;
    do {
        if((i % 2) === 0)
            i += 2;
        else
            i += 1;
        if( i > 10) i = 0;
        else
            sum +=i;
    }while(i >=1);
    return sum;
};

var quiz5b = function(i){
    var sum = 0;
    if((i % 2) === 1){
        ++i;
        sum += i;
    }
    for( ; i <=10; i += 2)
        sum += i;
    return sum;
};

```

```
print(quiz5a(10)); //0
print(quiz5b(10)); //10
```

Q6 b A13

```
var Matrice = function(n, m) {
    this.nb_lignes = n;
    this.nb_colonnes = m;
    this.tab = Array(n);
    for(var i = 0; i < n; i++){
        this.tab[i] = Array(m);
        for(var j = 0; j < m; j++){
            this.tab[i][j] = Math.floor(Math.random()*10)+1;
        }
    }
};
Matrice.prototype.printMat = function(){
    for(var i = 0; i < this.nb_lignes; i++){
        var ligne = "";
        for (var j = 0; j < this.nb_colonnes; j++){
            ligne += " "+this.tab[i][j];
        }
        print(ligne);
    }
};
mat1 = new Matrice(3, 4);
mat1.printMat();
```

Q6 d A13

```
Matrice.prototype.add = function(mat){
    var res = new Matrice((this.nb_lignes > mat.nb_lignes ?
    this.nb_lignes:mat.nb_lignes),
        (this.nb_colonnes > mat.nb_colonnes ?
    this.nb_colonnes : mat.nb_colonnes));
    if((this.nb_lignes == mat.nb_lignes) &&
        (this.nb_colonnes == mat.nb_colonnes)){
        for(var i = 0; i < this.nb_lignes; i++ )
            for(var j = 0; j < this.nb_colonnes; j++)
                res.tab[i][j] = this.tab[i][j]+mat.tab[i][j];
    }
    else {
        print("On ne peut pas additionner les matrices!");
        for(var i = 0; i < res.nb_lignes; i++ )
            for(var j = 0; j < res.nb_colonnes; j++)
                res.tab[i][j] = 0;
    }
    return res;
};
mat1 = new Matrice(3, 4);
mat1.printMat();
//print("-----");
//print(mat1.column(1));
print("+");
var mat2 = new Matrice(3, 4);
mat2.printMat();
print("-----");
var res = mat1.add(mat2);
res.printMat();
```