

Resolution :  
Partie B : Exercices :  
Variables

-----exo1-----

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez deux nombre : ");
        Scanner nb = new Scanner(System.in);
        float n1 = nb.nextFloat();
        float n2 = nb.nextFloat();
        System.out.println("Avant permutation:a= "+n1+"et b= "+n2);
        n1+=n2;
        n2=n1-n2;
        n1-=n2;
        System.out.println("Après permutation:a= "+n1+"et b= "+n2);
    }
}
```

-----exo2-----

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez la longueur en m: ");
        Scanner nb = new Scanner(System.in);
        float n1 = nb.nextFloat();
        System.out.println("Donnez la largeur en m: ");
        float n2 = nb.nextFloat();

        System.out.println("la surface du rectangle est:"+(n1*n2)+" m2");
    }
}
```

-----exo3-----

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez un nombre :");
        Scanner nb = new Scanner(System.in);
        float n1 = nb.nextFloat();
```

```

        System.out.println("le carre de "+n1+"est : "+(n1*n1));
    }
}

```

-----exo4-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez une temperature :");
        Scanner nb = new Scanner(System.in);
        float t = nb.nextFloat();
        float dk = (t+273);
        System.out.println("de celcius en kelvin: "+t+"---> "+dk+" °K");
        float dc = t-273;
        System.out.println("de kelvin en celsius: "+t+"---> "+dc+" °C");
    }
}

```

-----exo5-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez trois nombres :");
        Scanner nb = new Scanner(System.in);
        float nb1 = nb.nextFloat();
        float nb3 = nb.nextFloat();
        float nb2 = nb.nextFloat();
        float moy = (nb1+nb2+nb3)/3;
        System.out.println("la moyenne de "+nb1+" ,"+nb2+" et "+nb3+"
est: "+moy);
    }
}

```

## CONDITIONS

-----exo1-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez trois nombres :");
        Scanner nb = new Scanner(System.in);
    }
}

```

```

    int nbr = nb.nextInt();
    if(nbr%2 == 0){
        System.out.println( nbr+" est un nombre paire");
    }else System.out.println(nbr+ "est un nombre impaire");

}
}

```

-----exo2-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez votre age :");
        Scanner nb = new Scanner(System.in);
        int age = nb.nextInt();
        if(age > 18){
            System.out.println("Vous êtes majeur");
        }else if (age > 0 && age <=18)System.out.println("Vous êtes mineur");
        else System.out.println("Cas non gerer");
    }
}

```

-----exo3-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez trois nombres: ");
        Scanner nb = new Scanner(System.in);
        float a = nb.nextFloat();
        float b = nb.nextFloat();
        float c = nb.nextFloat();
        float max =(a < b)?((b<c)?c:b):((a<c)?c:a);
        System.out.println("le maximum de "+a+" ,"+b+" et"+c +" est : "+max);
    }
}

```

-----exo4-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez le poids du colis: ");
    }
}

```

```

Scanner nb = new Scanner(System.in);
float p = nb.nextFloat();
if(p>0 && p<50) System.out.println("le tarif est de: 5000GNF ");
else if (p>50) System.out.println("le tarif est de: 10000GNF ");
else System.out.println(" Cas non gerer ");

}
}

```

-----exo5-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donnez le poids du colis: ");
        Scanner nb = new Scanner(System.in);
        int n = nb.nextInt();
        if(n>0){
            if(n%4==0) System.out.println(n+" est bissectile");
            else System.out.println(n+" n'est pas bissectile ");
        }else System.out.println(" Erreur de saissie");
    }
}

```

### BOUCLES

-----exo1-----

```

public class Main {
    public static void main(String[] args) {
        for(int i=1;i<=10;i++) System.out.println(i);
    }
}

```

-----exo2-----

```

public class Main {
    public static void main(String[] args) {
        int i = 1;
        int som = 0;
        while (i <= 100) {
            som += i;
            i++;
        }
        System.out.println("la somme de 1 à 100 = "+som);
    }
}

```

-----exo3-----

```

import java.util.Scanner;

public class Main {

```

```

public static void main(String[] args) {
    System.out.println("Donnez un nombre: ");
    Scanner nb = new Scanner(System.in);
    int n = nb.nextInt();
    for(int i = 0; i <= 10; i++) System.out.println(n + "X" + i + " = " + (n*i));
}
}

```

-----exo4-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Donner un nombre: ");
        Scanner nb = new Scanner(System.in);
        int n = nb.nextInt();
        int i = 1; int fact = 1;
        do{
            fact *= i;
            i++;
        } while (i <= n);
        System.out.println("la factoriel de " + n + " est: " + fact);
    }
}

```

-----exo5-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Devinez le nombre ");
        Scanner nb = new Scanner(System.in);
        int dev = 20;
        int n;
        boolean trouve = false;
        while (!trouve){
            n = nb.nextInt();
            if (n < dev) System.out.println("Raté!!, essayer un nombre plus grand");
            else if (n > dev) System.out.println("Raté!!, essayer un nombre plus Petit");
            else { System.out.println("BRAVO!!, vous avez gagné");
                trouve = true; }
        }
    }
}

```

}

## Tableaux

-----exo1-----

```
public class Main {
    public static void main(String[] args) {
        int[] tab1 = {5, 6, 0, 8, 32};
        int[] tab2 = {12, 16, 20, 18, 3};
        int[] tab3 = new int[tab1.length];
        System.out.println("les elements du premier tableau sont: ");
        System.out.print("[");
        for (int i = 0; i < tab1.length; i++) {
            System.out.print(" " + tab1[i]);
            tab3[i] = tab1[i] + tab2[i];
        }
        System.out.print(" ]");System.out.println();

        System.out.println("les elements du deuxieme tableau sont: ");
        System.out.print("[");
        for (int i = 0; i < tab2.length; i++) {
            System.out.print(" " + tab2[i]);
        }
        System.out.print(" ]");System.out.println();

        System.out.println("La somme des elements du premier et
deuxieme tableau est: ");
        System.out.print("[");
        for (int i = 0; i < tab3.length; i++) {
            System.out.print(" " + tab3[i]);
        }
        System.out.print(" ]");
    }
}
```

-----exo2-----

```
public class Main {
    public static void main(String[] args) {
        int[] tab1={12, 16, 20, 18, 3};
        int max=tab1[0];
        System.out.println("les elements du tableau sont: ");
        System.out.print("[");
        for (int i = 0; i < tab1.length; i++) {
            System.out.print(" " + tab1[i]);
        }
    }
}
```

```

    }
    System.out.print(" ]");System.out.println();
    for (int i = 1; i < tab1.length; i++) {
        if (max < tab1[i]){
            max = tab1[i];
        }
    }
    System.out.print("la plus grande valeur du tableau est: "+max);

}
}

```

-----exo3-----

```

public class Main {
    public static void main(String[] args) {
        int[] tab1={12,16,20,5,0};
        int n = tab1.length;
        System.out.println("les elements du tableau avant le tri sont: ");
        System.out.print("[");
        for (int i = 0; i < tab1.length; i++) {
            System.out.print(" " + tab1[i]);
        }
        System.out.print(" ]");System.out.println();
        for (int i = 0; i < n-1; i++) {
            for(int j = 0; j < n-1-i; j++){
                if (tab1[j]> tab1[j+1]){
                    int temp = tab1[j];
                    tab1[j] = tab1[j+1];
                    tab1[j+1] = temp;
                }
            }
        }
        System.out.println("les elements du tableau après le tri sont: ");
        System.out.print("[");
        for (int i = 0; i < tab1.length; i++) {
            System.out.print(" " + tab1[i]);
        }
        System.out.print(" ]");System.out.println();

    }
}

```

-----exo4-----

```

public class Main {
    public static void main(String[] args) {
        int[] tab1={0,5,12,16,20};

```

```

int[] tab2={1,7,9,18,80};
int tab3[] = new int[tab1.length+tab2.length];
int i=0,j=0,k=0;
while (i < tab1.length && j < tab2.length){
    if (tab1[i] <= tab2[j]){
        tab3[k++] = tab1[i++];
    }
    else {
        tab3[k++] = tab2[j++];
    }
}
while (i< tab1.length){
    tab3[k++] = tab1[i++];
}
while (j < tab2.length){
    tab3[k++] = tab2[j++];
}

System.out.println("les elements du tableau 1er table:
[0,5,12,16,20]");
System.out.println("les elements du tableau 2em table:
[1,7,9,18,80]");

System.out.println("les elements du tableau après le tri sont: ");
System.out.print("[");
for(int l = 0; l < tab3.length; l++) {
    System.out.print(" " + tab3[l]);
}
System.out.print(" ]");System.out.println();
}
}

```

-----exo5-----

```

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        System.out.println("Devinez le nombre a chercher");
        Scanner nb = new Scanner(System.in);
        int n = nb.nextInt();
        int cpt =0;
        int[] tab1={0,5,12,16,20,4,8,5,0,0,8,7};
        for (int i=0;i<tab1.length;i++){
            if (tab1[i]==n){
                cpt++;
            }
        }
    }
}

```



```
}  
if (cpt>0){  
    System.out.println(n+" apparait "+cpt+" fois dans le tableau");  
} else {  
    System.out.println("cette valeur n'existe pas dans le tableau");  
}  
  
}  
}
```