

Correction of the second series

Exercise N°1 :

1. For each identifier proposed, respond with valid or invalid

C_1 : **valid**
purchase-Price : **invalid (- not accepted)**
2x : **invalid (start with a number)**
sum1 : **valid**
percentage% : **invalid (% not accepted)**
avg.student: **invalid (.unaccepted character)**
poste 3 : **invalid (the space unaccepted character)**
Z1Z: **valid**
téta : **invalid (é : inaccepted character)**
_2x : **valid**
Char : **invalid (reserve word for the character type)**

2. Give an appropriate variable name for the following information and suggest a type:

Number of students in the section → **NbrStd: integer**
 the bacculaureate average → **bacAavg : real**
 the degree of an earthquake : → **degEarthqk : real**
 number of a wilaya → **numWilaya : integer**
 blood group → **bloodGr : string**
 ranking of a club → **rank : integer**
 severity of a burn → **sevBurn : character**

Exercise N°2 :

A←3	permitted	A+1←A+3	not permitted(var←value)
X ←2.5	permitted	2X← NOT X	not permitted(var←value)
A←A DIV 3	permitted	A←X MOD 2	not permitted(x real)
A←X+1	not permitted	A←L AND A	permitted
L←1	permitted	X←L*A	permitted

Exercise N°3 :

Alogor1	a	b	Alogorithme 2	A	b	x	y	Alogorithme3	x	y	z	w	u	T
a,b : integer	/	/	a,b : integer	/	/	/	/	x,y : integer	/	/	/	/	/	/
a←2	2	/	x,y: real	/	/	/	/	z,w : real	/	/	/	/	/	/
b←5	2	5	x←l	/	/	1	/	u,t :boolean	/	/	/	/	/	/
a←a-b	-3	5	a←3	3	/	1	/	y←2		2				
b←a*b-1	-3	-16	y←a*x +3	3	/	1	6	u←true					1	
a←b+4	-12	-16	b← y-2		4		6	z←u+5			6			
a←b+4	-12	-16	a← a div 2+b mod 3	2	4		6	t← 'x'>'Z'						1
b←a+b	-12	-28	x←a *y + b*x	2	4	16	6	u←y>3et z<lou t					1	
b←a+b	-12	-40						w←not t et (x=y)				?		

Exercise N°4 :

Alogrithm Circle_Calcul

Constant

Pi=3.14

Variables

Ray, Dm, Pr, Sr : real

Begin

Ray←10

Dm←2 * Ray

Pr← Pi * Dm

Sr← Pi * Ray * Ray

Write ("The circle of radius ",Ray, " has diameter", Dm ",perimeter ", Pr , "and surface", Sr)

End

TP

Consider the following program:

1. syntactic errors

```
#include<stdio.h>
int main()
{
    int n,u,d,c,s;
    n=258;
    u=n%10 ;
    C=n /100 ;;
    d=(n /10)%10 ;
    s=u+c+d,
    printf("resultat : %d\n",s);
    print("end of programm }");
}
```

correct program

```
#include<stdio.h>
int main()
{
    int n,u,d,c,s;
    n=258;
    u=n%10 ;
    C=n /100 ;;
    d=(n /10)%10 ;
    s=u+c+d;
    printf("resultat : %d\n",s);
    printf ("end of programm }");
}
```

Initialize n to the value 739 and execute the program. :

result: 20

What does the program do?

The programme calculate the sum of digits of 3 digits

Modify the program to calculate the sum of digits of a composite integer of 4 digits.

```
#include<stdio.h>
int main()
{
    int n,u,d,c,s,t;
    n=258;
    u=n%10 ;
    t=n /1000 ;
    c= (n/100)%10;
    d=(n /10)%10;
    s=u+c+d+t;
    printf("resultat : %d\n",s);
    printf ("end of program ");
}
```