Exercise series: Tutorial (TD) N°: 02

Exercise N°1 :

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

    C_1 , Prix-achat , 9a , sum1 , max% , moy.student , poste 1, NNN, téta , _2x , char

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

    Number of students in the section; the baccalaureate average; the degree of an earthquake, number of a wilaya, blood group, ranking of a club in the Algerian football championship, severity of a burn on the human body

Exercise N°2 :

Consider the following declarations: *X: Real, C: Character, A: Integer, L: Boolean*

For each of the following instructions, indicate whether the assignment is permitted or not.

A←8	A+1←A+3
X ←2.3	2X← NOT X
A←A DIV 2	A←X MOD 2
A←X~	A←L AND A
L←1	X←L*A

Exercise N°3 :

Give the values of the variables after the execution of each algorithm

Alogorithme1	Alogorithme 2	Alogorithme3
a,b : integer	a,b : integer x,y: real	x,y : integer z,w : real
a←1	x←2	u,t :boolean
b←3	a←1	y←1 u←false
a←a-b	y←a*x +3	z←u+5
b←a*b-1	b← y-2	t← 'x'>'Z'
a←b+4	a← a div 2 + b mod 3	u←y>3et z<1ou t
a←b+4	x←a *y + b*x	w←not t et (x=y)
b←a+b		
b←a+b		

Exercise N°4 :

Write an algorithm that allows you to calculate the diameter, perimeter and area of a circle. To do this, we will proceed as follows:

a) Declare the constant variable π and the variable Ray containing 10 as initial value.

b) Declare three variables DM, PR and SR.

c) Assign respectively to DM, PR and SR the values of the diameter, perimeter and surface of a circle whose radius is Ray.

d) Display the following message "The circle of radius 10 has diameter DM, perimeter PR and surface SR".

TP

Consider the following program:

1. Enter and save the program
2. Detect syntactic errors and correct the program.
3. Execute the program.
4. What does the program do?
5. Modify the program to calculate the sum of digits of a composite integer of 4 digits.

```
#include<stdoi.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 }");
)
```